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THE TABERNACLE OF JEHOVAH

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A Thesis Presented to  
The Faculty of Concordia Seminary  
Department of Old Testament Theology

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In Partial Fulfillment  
of the Requirements for the Degree  
Bachelor of Divinity

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by  
Herman R. Mayer

July 1945

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PREFACE

The Sanctuary of Israel in the wilderness, its Court, Tabernacle, and furniture, has not totally disappeared, but it still exists. The physical structure, which was built under the leadership of Moses, we recognize, has been lost or destroyed. It however exists in the minds of God's people through the use of the Bible. As long as the written Word remains with us, the Sanctuary will not and must not perish.

Perhaps some of the most neglected chapters in the Bible are those which give a concise description of the Sanctuary. They are neglected by Bible readers and students alike. Many who read through the Exodus account find the subject matter lacking in excitement or too involved to give it a little thought. Even Bible students are inclined to read through this particular section in such haste that they remove every opportunity of giving the structure of the Sanctuary careful consideration. A study of the Sanctuary therefore should be a challenge to every one who holds a claim on interest in the Bible.

Such a challenge has proved to be the cause for the present study and investigation. May the present presentation arouse new interests to study the Sanctuary. May the present discussion be a help in offering convincing solutions for many of the problems which do exist. Not every problem can be solved, but an opinion may be profitable in enriching an understanding of the Exodus account.

#### INTRODUCTION

"Let my people go!" (Ex. 8,1.) In these words God demanded Pharaoh to release enslaved Israel. And why? God had chosen the Jewish race from among all nations as His own, and furthermore He proved this claim on Israel. This people He led out of Egypt and worked them over the Sinaiite Peninsula to Canaan, the Land of Promise. In the Sinaiite Peninsula God established the community life for His newly liberated people. He laid down the basis for their moral character and through Moses gave the detailed code of laws which regulated every phase of Israelite activity, both religious as well as civil. In the religious phase God's Tabernacle, erected at the foot of Mt. Sinai, is a glowing example of God's concern for Israel. God wanted His people to have a holy place for religious worship. He therefore did not let the choice



## CHAPTER I

### INTRODUCTION

"Let my people go!" (Ex. 5,1.) In these words God demanded Pharaoh to release enslaved Israel. And why? God had chosen the Jewish race from among all nations as His Own, and furthermore He proved this claim on Israel. This people He led out of Egypt and routed them over the Sinaitic Peninsula to Canaan, the Land of Promise. On the Sinaitic Peninsula God established the community life for His newly liberated people: He laid down the decalaw as their moral standard and through Moses gave the detailed code of laws which regulated every phase of Israelite activity, both religious as well as civil. In the religious phase God's Tabernacle, erected at the foot of Mt. Sinai, is a glaring example of God's concern for Israel. God wanted His people to have a holy place for religious worship. He therefore did not let the choice



of materials and design of this Sacred Building to the skilled artisans among the Hebrews, but God Himself, in His divine wisdom, drew the plans. On Sinai He revealed the details of the structure to His servant Moses as the intermediary between Himself and Israel. God wanted one sanctuary (holy place) for His people in Canaan. He wanted it built according to His plans by human hands. This Sacred Edifice in the Book of Exodus is a monument for proof that God had a deep interest in the religious and political welfare of Israel.

The Sacred Edifice of Sinai therefore offers material for a study of paramount importance. It is primarily important because it was so intimately bound up with the life and worship of God's chosen people under the Old Testament covenant. It was centrally located and served to bind the Hebrew families into a political unit. For a period of five hundred years this portable structure served Israel as its house of worship. It is also important because it ranks as one of the most remarkable pieces of architecture of all times. It served as a prototype of the three later Hebrew temples: the temple of Solomon, the temple of Zerubbabel, and the renovated temple of Herod. For these reasons it holds a high degree of importance for every Bible student and from every point of view is worthy of thoughtful study.



Paul said: "All Scripture is given by inspiration of God." (2 Tim. 3,16.) God had a threefold purpose in transmitting His written Word to us: a) to reveal Himself, b) to reveal man's totally sinful condition, and c) to reveal man's reconciliation to God. A study of the Sanctuary in the wilderness will bear out these three factors, for we know that "whatsoever things were written aforetime were written for our learning." (Rom. 15, 4.) Since Christ is the central subject of the Old Testament as well as of the New Testament, the Sanctuary, as an external emblem, reveals spiritual truth. Its design and function, as a type of Christ, discloses the person and work of redemption.

The spiritual significance of the Jewish Tabernacle can be seen from another angle. Out of Mt. Sinai God, who is a God of justice, gave the Law and codified His prohibitions and will for Israel. From the summit of Mt. Sinai God, who is a God of grace, gave the plan of the Sanctuary to Moses. At the foot of Mt. Sinai Israel experienced God's grace in the Sanctuary which provided a haven for the offenders of the Law. In this physical structure, the dwelling of divine Grace, sinful man could approach a holy God.

### 1. Source of Information

The most complete account of the Tabernacle is recorded in the Bible. Of the two descriptions the first



is found in Exodus chapters twenty-five to twenty-eight. These four chapters relate God's plan and command to build the Sanctuary at Sinai. This description presents the divine side. The second description is found in Exodus chapters thirty-five to forty. These six chapters describe the execution of God's command and relate the actual construction. This description presents the human side. Both accounts are very similar and in many passages identical to the last word. The parallels differ chiefly only in tense. In the former account we find, "Thou shalt make it"; in the latter, "He made it."

Other passages in Scripture will shed light on the subject. We must take into account the facts in connection with the transportation of the Tabernacle. (Num. 3.) We must also consult for comparison's sake the specifications for Solomon's Temple (1 Kings 6; 2 Chron. 3,4.) and the vision of Ezekiel (chapters 40-42).

Outside of the Bible the only ancient source of information is Josephus, the Jewish historian, who has little to offer in addition to the Bible. His description is chiefly a repetition of the Bible description with a few additional suggestions of his own.

## 2. Nomenclature

We must first present an overview of proper names before undertaking a reconstruction of the Tabernacle. Let



us therefore first agree on a set of terms, and we shall employ this set of terms to distinguish the whole from its parts and also individual parts from other parts.

In the Exodus account a term may refer to the entire structure as a unit and again occur in another passage to refer to a section or part of the whole construction. This is often confusing, and such interchanging of terms presents many exegetical problems. A case in point is the term tabernacle. This word designates the Sacred Edifice as a whole. Tabernacle also designates the rectangular structure within the court (Ex. 26,15), the Holy Place (Ex. 26,35), and also the Most Holy Place (Ex. 40,21). Now, when the term tabernacle occurs, to what does it refer? To the whole or just a part? That always is the question. In this connection it is well to remember that wherever any term of the tabernacle construction is used, its exact reference must be determined from the context. We shall now consider briefly the individual terms and from such a study proceed to draw up a catalogue of terms for our use in this thesis.

Several terms occur in Scripture to identify the Sacred Edifice of the wilderness as a whole. The complete structure is call a "sanctuary,"  $\text{מִקְדָּשׁ}$  (Ex. 25,8). This Hebrew term God employed, for He recognized it to be a holy place dedicated to Him and



His worship. The word  $\text{מִקְדָּשׁ}$ , "sanctuary" (Ex. 36,1), is derived from the same root as the former term. Less frequently we detect that "tabernacle of the congregation,"  $\text{אֹהֶל מוֹעֵד}$  (Ex. 35,21), and "tabernacle of testimonies,"  $\text{מִשְׁכַּן עֵדוּת}$  (Ex. 38,21), are employed. Frequently "tabernacle,"  $\text{מִשְׁכָּן}$  (Ex. 27,9), is found to denote the whole, embracing all of its individual parts. Its meaning denotes a "dwelling place" where God resides. Most writers on this subject have adopted the term tabernacle to convey the collective concept of the Sanctuary of Israel. One now begins to realize how confusing five different terms for the same idea can become, and this confusion is magnified when we recognize that a single term may refer either to the whole or to an individual part of the whole construction. In order to avoid such confusion, misunderstanding, and need for explanation of terms, let us select one from the five and refer to the idea of the whole by means of the nomen, SANCTUARY, because such is the term which God employed when He commanded Moses to instruct the people to make the Sanctuary. (Ex. 25,8.)

We shall consider next the designation for the individual parts of the Sanctuary. The first of these is the "court,"  $\text{חֲצֵר}$ . (Ex. 27,9.) However, this term presents no difficulty since it refers solely to the court.



The small rectangular building enclosure within the court is the second part of the Sanctuary. Three terms occur in Exodus to designate this box-like-tent form. "Tent,"  $\text{אֹהֶל}$  (Ex. 26,7; 26,11; 26,36), and "tabernacle of the congregation,"  $\text{אֹהֶל מוֹעֵד}$  (Ex. 30,18), are employed rarely in comparison to "tabernacle,"  $\text{מִדְבָּר}$ . (Ex. 26,15; 36,8.) What is our conclusion? Because of the frequent use and repeated use of the term "tabernacle" with reference to the rectangular enclosure, we shall allow TABERNACLE to serve as nomen for this part of the Sanctuary.

The Tabernacle housed two sub-parts -- the Holy Place and the Most Holy Place. The Holy Place,  $\text{קֹדֶשׁ}$  (Ex. 26,23), is also called "tabernacle of the congregation,"  $\text{אֹהֶל מוֹעֵד}$  (Ex. 27,21), and "tabernacle,"  $\text{מִדְבָּר}$ . (Ex. 26,35.) The second sub-part, the Most Holy Place, or as the Hebrew suggests "the Holy of Holies,"  $\text{קֹדֶשׁ הַקֳּדָשִׁים}$  (Ex. 26,34), rarely is designated as "(tabernacle of) testimony,"  $\text{אֹהֶל עֵדוּת}$ . (Ex. 27,21.)

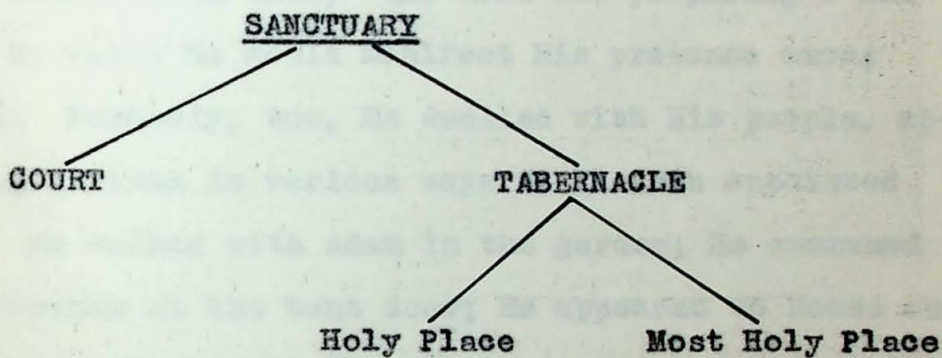
The nomenclature of the Sacred Edifice of Sinai and the terms for individual parts can be fixed by no means to a definite catalogue of terms. It is hard for one to determine exactly which is the best choice of terms. What makes a selection difficult is that the Bible uses several terms to designate one and the same thing. How can any one be so dogmatic as to say that there is only one catalogue of terms? Every selection is based entirely



on personal judgment. In this paper the selection of specific terms for the whole structure and for each of its parts has been determined on the basis of two questions:

1. How frequently does this term occur in the  
Authorized Version?
2. How much explanation will the use of this  
term require?

We shall base our present discussion on the terms found in the following diagram:



## CHAPTER II

### Divine Plan and Purpose

When God said, "Let them make me a Sanctuary; that I may dwell among them," the Lord was preparing a new means by which He would manifest His presence among Israel. Formerly, too, He dwelled with His people, appearing to them in various ways at His own appointed time. He walked with Adam in the garden; He communed with Abraham at the tent door; He appeared to Moses out of the burning bush. His presence was revealed to Jacob at Bethel. At Bethel therefore, because of God's presence that night, Jacob erected an altar in his honor. There were many such altars set up in the Old Testament times. Although many manifestations of divine presence are known to have occurred before the erection of the Sanctuary, yet up to that time God had not appointed a permanent place where He might dwell among His people.



Now God called Moses up into the Mt. of Sinai.

There he waited six days for the voice of God, and finally on the seventh day God spoke to him out of a cloud. For forty days He revealed to him the entire divine plan for maintaining worship and training Israel in spiritual knowledge. In order to accomplish this great undertaking God showed Moses a pattern of the Sanctuary. Whether the design was presented in miniature model or as a mental perception, we shall never be able to determine; but God did disclose in His own appointed way the divinely designed plan in a theophanic manner. Even as a teacher who gives a lesson to the simple must condition his instruction by the nature of the subject and previous knowledge of the pupils, so also God had to descend to the mental level of Moses. His thoughts had to be transferred into the concepts of human understanding.

Thus God, as the master architect, reviewed His "blueprint" with Moses. Not one jot or tittle was omitted. He showed him piece for piece the pattern of the Sanctuary — the Court and its construction, the Tabernacle and its construction, the furniture and its construction. All work had to meet divine specifications. God determined what materials should be collected, and how these should be used. The best materials were prescribed: "Gold, and silver, and brass, and blue, and



purple, and scarlet, and fine linen, and goats' hair, and rams' skins dyed red, and badgers' skins, and shittim wood, oil for the light, spices for anointing oil, and for sweet incense, onyx stones, and stones to be set in the ephod, and in the breastplate." (Ex. 25,3-7.)

God did not overlook one detail, for He gave consideration to the divine purpose of the Sanctuary. It should serve as the residence of Jehovah, the Lawgiver, and as the center of legislation. It should provide a dwelling where the Lord would manifest Himself in the Most Holy Place. It should supply shelter for the Ark of the Covenant. It should provide a central meeting place for the children of Israel. For the convenience of a nomadic people it could not be built of cumbersome materials. The desert temple would have to be moved from place to place, beginning with the wanderings in the wilderness and continuing on during the sojourn in the Promised Land. This required a portable construction, a structure which could easily be transported by means of simple conveyances over the highways of sand and mountainous regions. Furthermore, God desired to dwell among Israel. He chose for Himself a peculiar people, a people set apart from other nations. Yes, He wanted to be their God. To this people He had given the command, "Thou shalt have no other gods before me." (Ex. 20, 3.) The Hebrew



people were often given over to the sin of idolatry and idolatrous practices. By means of the Sanctuary God hoped to sever them from all idolatrous associations and draw them close to Him with his ever-abiding presence. When problems confronted them, when perplexities beset them, they could come before His presence in the Sanctuary. There they could find spiritual comfort. The very elements and essence of the Sanctuary could impart spiritual truth. "They (children of Israel) belonged to an age in which symbolism was everywhere employed. They had come from a land in which much of the writing was pictorial; and the nations then, as the recently-discovered monuments attest, were in the habit of putting all religious truths into external emblems."<sup>1</sup> The Sanctuary's form, its worship within and without, would associate them with Christ. Therefore God took special care in revealing the pattern of the Sanctuary to Moses and rigidly commanded him, "And thou shalt rear up the tabernacle according to the fashion thereof which was shewed thee in the mount." (Ex. 26,30.)

Divine planning also considered the quality of materials. Only the best materials would be used for the

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1. William M. Taylor, Moses the Law-Giver, p. 233.



Sanctuary. They must be durable and weather resistant. Even though a desert land, the Sinaitic Peninsula experienced rainfall, which today averages 10 inches annually. The materials had to be weather proof; they had to be unappetizing to vermin and insects; they had to resist destructive blasts of wind mingled with sand. God foresaw all of these conditions and planned the Sanctuary accordingly.

The source of the material and method for gathering it was also arranged. God commanded that only the children of Israel were to give materials, and they were to bring them as a free-will offering. That was the way in which God had planned it.

## CHAPTER III

The Offering for the Sanctuary

After Moses had returned from the Mount for the second time, he proceeded to carry out the command of the Lord and invited the people to bring an offering. They should bring their offering not as an imposed tax or to avoid social pressure or measures of force but as free gifts to the Lord. The spirit and love for service to the Lord was to act as the only impelling motive.

The gifts for which Moses asked were: "Gold, and silver, and brass, and blue, and purple, and scarlet, and fine linen, and goats' hair, and rams' skins dyed red, and badgers' skins, and shittim wood, oil for the light, spices for anointing oil, and for sweet incense, onyx stones, and stones to be set in the ephod, and in the breast plate." (Ex. 25,3-7.) The materials requested



were precious metals, manufactures, articles of foreign merchandise. The offering which the children of Israel made in their day is estimated to have amounted to about \$2,000,000<sup>1</sup>; and this sum was raised by approximately 1,200,000 men and women. (In estimating the cost of the Sanctuary, one can only give approximate relative values.) Their services of labor were offered freely. (Ex. 35,29.) Even though the Israelites had no outlook as to what their needs for the future would be, they trusted in the Lord who had provided them daily with manna and quail, and so they responded with their whole heart. "Both men and women.....brought bracelets, and earrings, and rings, and tablets, all jewels of gold: and every man that offered offered an offering of gold unto the Lord. And every man, with whom was found blue, and purple, and scarlet, and fine linen, and goats' hair, and red skins of rams, and badgers' skins, brought them. Every one that did offer an offering of silver and brass brought the Lord's offering: and every man, with whom was found shittim wood for any work of the service, brought it. And all the women that were wise hearted did spin with their hands, and brought that which they had spun both of blue, and of purple, and of scarlet, and of fine linen.

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1. Iris Ikeler McCord, The Tabernacle, Its God-Appointed Structure and Service, p. 17.



And all the women whose heart stirred them up in wisdom spun goats' hair. And the rulers brought onyx stones, and stones to be set, for the ephod, and for the breastplate; And spice, and oil for the light, and for the anointing oil, and for the sweet incense." (Ex. 35,22-28) Both those of high social status and those of low estate joined hearts and hands for the cause and presented their goods and services for the building of the Sanctuary. Every morning they brought their offerings to Moses. (Ex. 36,3.) They gave so liberally that Moses had to restrain them from contributing more. (Ex. 36,6.)

But how could a people who had left their land of bondage and journeyed within a desert-land bring an offering of such valuables? In Egypt they had been enslaved, but in the wilderness they were without a permanent residence and without a regular income. Yet, one must remember that their needs of livelihood were directly provided by Jehovah. What the children of Israel offered, they obtained through rightful ownership. Several explanations can be given for this accumulation of wealth. The first fact is taken directly from Scripture. Before their departure from Egypt, "they borrowed of the Egyptians jewels of silver, and jewels of gold, and raiment: And the Lord gave the people favour in the sight of the Egyptians, so that they lent unto



them such things as they required. And they spoiled the Egyptians." (Ex. 12,35b-36.) The Egyptians were fond of jewelry. This demand among the Egyptians for fine jewelry seems to have arisen out of the practice of ornamenting the dead.<sup>2</sup> From the hands of the Egyptians such articles of value passed into the hands of the Israelites. Secondly, the explanation may be offered that materials could easily have been made available at the shores of the Red Sea, for after the pursuing Egyptian army, which was equipped with the finest war materials of its day, had drowned in the Sea, the bodies and equipment could easily have washed onto the shore. What should prevent the Israelites from stripping these corpses? A third source for acquiring these earthly possessions could have been the ore mines and wooded regions of the Sinaitic Peninsula. There were "mining colonies at Surabit el Khadim, or Jebel Nasb, both of which were only about two days journey from the encampment."<sup>3</sup> The timber could have been secured from the neighboring tribes. Finally, it could have been possible to barter with the merchant caravans which travelled from India over Arabia into Egypt with their oriental products.

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2. David Samuel Margoliouth, "Egypt," The Encyclopaedia Britannica, 14th. ed., vol. 8, p. 54.

3. Jamieson, Fausset, and Brown, A Commentary Critical, Experimental and Practical on the Old and New Testament, vol. I, p. 382.



Now we shall proceed to an investigation of the materials which Moses gathered together. How interesting to see that every kingdom in nature supplied a share toward building the Sanctuary. The mineral kingdom supplied metals and stones; the vegetable kingdom supplied wood, fabric, oil and spices; and the animal kingdom furnished hides and goats' hair. The substance of some of these materials are hard to explain since the original designation of a few of the Hebrew words has lost their precise meaning. Before we discuss the construction of the Sanctuary, let us first make our decision as to the materials which the Hebrew builders used.

# 1. Material from the Mineral Kingdom

## a. Gold

Moses collected 29 talents of gold and 730 shekels of gold. (Ex. 38,24.) Davis values a talent of gold at \$29,374.50 and a shekel of gold at \$9.791.<sup>4</sup> The total value according to these figures is \$859,007.93. This enormous amount of gold, which Israel carried out of Egypt, does not surprise us since much of this metal poured into Egypt through conquest and much was obtained from Pharaoh's mines. Herodatus tells us that "Egypt

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4. John Davis, A Dictionary of the Bible, pp. 758 and 811.



had her own gold mines in Nubia,"<sup>5</sup> and there were gold mines also in the mountains along the Red Sea.<sup>6</sup>

b. Silver

The silver offering amounted to 100 talents and 1775 shekels. (Ex. 38,25.) A talent of silver is equivalent to \$1950, and the value of a shekel of silver is 65¢.<sup>7</sup> The total amounts to \$196,153.75. Silver, called "white gold," was more scarce in Egypt than gold. It seems to have been shipped in from Asia Minor. "The silver mines of Egypt were said to produce annually 3,200 myriads of minae."<sup>8</sup>

c. Brass

The offering of brass was 70 talents and 2400 shekels. (Ex. 38,29.) The estimated value of the brass offering is \$3180.<sup>9</sup> The כֶּסֶף, translated in the King James as "brass," is a metal which requires explanation. Brass is an alloy composed of two parts copper and one part zinc, but zinc is a discovery of more recent date. In 1597

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5. G. A. Frank Knight, Nile and Jordan, p. 175, where he quotes from Herodotus III, 23.

6. G. A. Frank Knight, op. cit., p. 175.

7. John Davis, A Dictionary of the Bible, pp. 758 and 811.

8. G. A. Frank Knight, Nile and Jordan, p. 175, taken from Diodorus, I, 49.

9. George C. Needham, Shadow and Substance, p. 29.



Libarius unknowingly discovered zinc in India and described it as a "peculiar tin." Zinc smelting first began in England around 1730.<sup>10</sup> Therefore the brass in Exodus was not brass as we have it today. This conviction is supported by the fact that brass weapons and tools are not found in the ruins of early cities.

Some believe  $\text{רַחֲוֵי}$  to have been bronze, which is an alloy of copper and tin. This interpretation is possible since the Israelites knew of tin. (Num. 31, 22.) The Phoenecians had brought tin from the mines of Cassiterides and Cornwall, which embraced the Scilly Isles.<sup>11</sup> Since the Hebrews knew of copper ("brass") and tin, by fusing these two metals they could have produced bronze. However, from excavations of ancient civilizations we learn that this metal was a rare substance.

The latest opinion on the "brass" in Exodus favors the interpretation of copper. Copper was mined in the Sinaitic mountains during the fourth and fifth dynasty (2900-2625 B.C.). The Pharaohs of Egypt mined this ore at Wady Magharah, Sarabit el Khadim, Wadis Nasb, Khalig, el-Marka, and Sened.<sup>12</sup> The Edomites had surface copper

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10. "Zinc," The Encyclopaedia Britannica, vol. 23, p. 950.

11. James Hastings, A Dictionary of the Bible, vol. III, p. 375.

12. James Hastings, op. cit., vol. III, p. 375.



mines at Khirbet Nahas, thirty-five miles south-east of the Dead Sea.<sup>13</sup> Excavations in the countries south of the Mediterranean give proof that ancient metallurgists used copper in abundance. M. Amelineau found many objects and utensils of copper at Om-el-Gaab in a cemetery of Abydos.<sup>14</sup> Breasted informs us that during the Old Kingdom (2980-2475 B.C.) "they (the Egyptians) drilled the toughest of stone, like diorite, with tubular drills of copper, and the massive lids of granite sarcophagi were sawn with long copper saws which, like the drills, were reinforced by sand or emery."<sup>15</sup> In 1940 Nelson Glueck carried on an excavation at Tel El-Kheleifeh, a smelting colony near the seaport of Ezion-geber (Elath). In the debris he found copper fish-hooks, a copper casing of a seal, copper arrow-heads and spear-points, fine copper dishes and tools. He estimated that some of the smelter walls date back thirty centuries. Mr. Glueck reported on his discoveries as follows: "Copper sulphide fumes of the copper ores being reduced in the smelter turned its walls green."<sup>16</sup> Again he says: "It seems likely that the coppersmiths of

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13. George A. Barton, Archeology and the Bible, p. 119.

14. Charles Randall Barnes, "Copper," The People's Bible Encyclopedia, p. 741.

15. James Henry Breasted, A History of Egypt from the Earliest Times to the Persian Conquest, p. 93.

16. Nelson Glueck, "The Third Season of Excavation at Tel El-Kheleifeh," Bulletin of the American Schools of Oriental Research, no. 79, (Oct. 1940), p. 3.



Ezion-geber: Elath, like their Egyptian contemporaries, possessed the secret of tempering copper to such a degree of hardness that it could be used for tools and drills."<sup>17</sup> We must not think of the ancient copper as the soft pure copper of today, since modern copper is refined through an electric process.

#### d. Precious Stones

Other minerals which the children of Israel contributed were "onyx stones, and stones to be set in the ephod, and in the breastplate." (Ex. 25,7.) The stones in the ephod were onyx (Ex. 28,9) and in the breastplate there were the sardius, topaz, carbuncle, emerald, sapphire, diamond, ligure, agate, amethyst, beryl, onyx, and jasper. (Ex. 28, 9. 17-20.) Most of the names given to these stones in the English text have been transliterated directly from the Greek with the exception of two, the emerald and diamond. Neither the Septuagint nor Josephus enlighten us on the identity of these gems. In the Old Testament the terms for these gems are very confusing, and it is doubtful where we may classify them in our system today. The "diamond," as we know it, is a substance too hard to engrave; therefore, according to our terminology another stone beside the diamond must

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17. Nelson Glueck, op.cit., p. 17.



have been set in the breastplate. The meaning of "beryl" is too uncertain to define. The meaning of the "amethyst" is well established; the "carbuncle" designates the emerald; and the "sapphire" seems to designate our lapis lazuli. One can offer the best information on these Old Testament gems by drawing up a comparative list in the form of the following catalogue:

# GEM OFFERING

A. V. RENDERING	GESENIUS <sup>18</sup>	DAVIS <sup>19</sup>	KNIGHT <sup>20</sup>
1. Sardius.....	ruby (red).....	carnelium.....	jasper..... (red)
2. Topaz.....	topaz (yellow)..<	topaz.....	serpentine.....
3. Carbuncle....	emerald.....	emerald.....	rock crystal....
4. Emerald.....	????????????????	????????????????	garnet..... (red)
5. Sapphire.....	sapphire.....	sapphire.....	lapis lazuli....
6. Diamond.....	onyx.....	sardonyx ???????	jasper..... (green)
7. Ligure.....	opal.....	jacinth.....	quartz..... (yellow)
8. Agate.....	agate.....	????????????????	carnelian.....
9. Amethyst.....	amethyst.....	amethyst.....	amethyst.....
10. Beryl.....	topaz.....	????????????????	jasper..... (yellow)
11. Onyx.....	onyx.....	onyx.....	felspar..... (green)
12. Jasper.....	jasper (green)..<	jasper.....	onyx.....

18. William Gesenius, A Hebrew and English Lexicon of the Old Testament,  
Including the Biblical Chaldee, passim.

19. John Davis, A Dictionary of the Bible, passim.

20. G. A. Frank Knight, Nile and Jordan, p. 179.



GEM OFFERING — Continued

MARTIN <sup>21</sup>		STRONG <sup>22</sup>		PETRIE <sup>23</sup>	
				Early	Late
1. carnelium.....	(red)	carnelian.....	(light red)	jasper.....	sard.....
2. peridot.....	(yellow-green)	chrysolite.....	(bright yellow)	serpentine.....	peridot.....
3. emerald.....	(green:red)	emerald.....	(grass green)	garnet= carbuncle	
4. ????????????????		garnet.....	(dark red)	quartz crystal...	emerald.....
5. lapis lazuli....		lapis lazuli....	(deep blue)	lazuli.....	lazuli.....
6. jasper.....		chalcedony.....	(pink)	corundum.....	corundum.....
7. zircon-hyacinth.	(yellow)	jacinth.....	(buff)	agate.....	agate.....
8. chalcedony.....	(red:black)	agate.....	(red streaks)	agate?????????????	agate.....
9. amethyst.....	(purple-violet)	amethyst.....	(purplish)	amethyst.....	amethyst.....
10. ????????????????		topaz.....	(dull yellow)	jasper.....	topaz.....
11. onyx.....	(red banded)	beryl.....	(pale green)	onyx???????????????	onyx.....
12. jasper.....	(blue:green: rose)	jasper.....	(clouded gray)	jasper.....	jasper.....
				(dark green)	

21. Daniel S. Martin, "Mineral Kingdom," The People's Bible Encyclopedia, pp. 725-742.

22. James Strong, The Tabernacle of Israel in the Desert, p. 68.

23. James Hastings, A Dictionary of the Bible, vol. IV, pp. 619-621



## 2. Materials from the Vegetable Kingdom

The items, which the vegetable kingdom supplied, were "fine linen," "shittim wood," "oil," and "spices." (Ex. 25, 4-6.)

### a. Fine Linen

The Hebrew word לִינָן is a difficult word to explain. Whether it denotes linen or cotton is much debated. לִינָן is a word borrowed from the old Egyptian shenti. The Septuagint translates βυσσός, byssus.

"Linen" is not an impossible translation. Breasted reports that flax was plentifully cultivated already under the Old Kingdom (2980-2475 B.C.) in Egypt.<sup>24</sup> Thomson and Rawlinson, who inspected Egyptian mummy cloths, discovered it to be invariably linen.<sup>25</sup> This alone cannot determine the meaning of לִינָן. Ancient tombs also give up mummies wrapped in cotton cloth.<sup>26</sup> The meaning of the word indicates whiteness, and this speaks in favor of cotton fabric. To this day the Arabs apply shesh to fine muslin, which is a cotton cloth. Gesenius is of the opinion that לִינָן designates the

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24. James Henry Breasted, A History of Egypt, p. 96.

25. Jamieson, Fausset, and Brown, A Commentary on the Old Testament, vol. I, p. 383.

26. John Davis, "Linen," A Dictionary of the Bible, p. 454.



Egyptian byssus, a white, fine and costly cotton.<sup>27</sup>

Keil maintains that the ancients often employed the term "fine linen" to designate cotton cloth.<sup>28</sup>

#### b. Shittim Wood

Another botanical offering was "shittim wood" of the shittah tree. (Luther translates this as fir tree.) This building material was cut out of forests of Acacia nilotica, which grew in the southern part of the Sinaitic Peninsula and in Egypt.<sup>29</sup> This is the only tree found on the Peninsula. In the vicinity of Sinai travellers still may see the acacia.

The Acacia nilotica is a spreading tree, rising to a height of twenty to twenty-five feet, with a gay bipinnate foliage, blue blossoms, and long thorns. The wood is very hard, close-grained, and light in weight. It is indestructible by insects and resists decay even in water. When freshly cut, it has a yellow hue, but as it dries, it becomes dark, almost black like ebony. Such trees furnished the lumber for the Sanctuary.

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27. William Gesenius, A Hebrew and English Lexicon of the Old Testament, p. 1113.

28. Carl Friedrich Keil, Manual of Biblical Archeology, vol. I, p. 105.

29. John Davis, "Shittah Tree," A Dictionary of the Bible, p. 716.



### c. Oil

The offering of oil was the oil from the olive tree. (Ex. 27,20; 30,24.) Even though the Israelites of the Exodus did not see Canaan, the land of olive groves, they were acquainted with this species of flora. (Deut. 24,20.) They obtained pure oil by beating the berry to pieces and crushing it; then they placed the meat in a basket and allowed the oil to flow out.<sup>30</sup>

There is no evidence that the olive tree grew on the Peninsula of Sinai. From where did the Israelites obtain the olive fruit? Merchants from the north might have sold this product to them, or they brought the oil out of Egypt. Egypt imported large quantities of oil from Canaan<sup>31</sup> and Tyre. (cf. Eg. 27,17.) This precious oil was used in the service of the Sanctuary.

### d. Spices

The vegetable kingdom also supplied a variety of spices. These were "myrrh," "cinnamon," "calamus," and "cassia," (Ex. 30, 23-24.); "stacte," "galbanum," and "frankincense." (Ex. 30,34.) We shall define each of these aromatics briefly.

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30. John Davis, "Oil," op. cit., p. 552.

31. G. A. Frank Knight, Nile and Jordan, p. 177.



# #1. Myrrh

The "myrrh" of the ancient Hebrews was derived from the fragrant bark of the Balsamodendron Myrrha, the shrubby Nees. Pliny tells us that it grew in Arabia.<sup>32</sup>

# #2. Cinnamon

The "cinnamon" was an aromatic bark produced by the Cinnamomum zeylanicum. It flourished in Arabia.<sup>33</sup> The oil was obtained by means of a distilling process. It was golden-yellow in color and possessed a pleasing aroma.

# #3. Calamus

The Hebrew word for "calamus" denotes a reed or cane. Perhaps the Andropogon calamus aromaticus of India is meant. It gave off a highly sweet scent.<sup>34</sup>

# #4. Cassia

It may have been an aromatic bark resembling the cinnamon, less fragrant and less valuable.<sup>35</sup> The Revised Version in the margin suggests the Costus, a plant identified with the Aplotaxis lappa of China, which is valuable for its odoriferous root.<sup>36</sup>

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32. John Davis, "Myrrh," A Dictionary of the Bible, p. 523, from Pliny xii, 16.

33. John Davis, "Cinnamon," op. cit., p. 142.

34. John Davis, "Calamus," op. cit., p. 109.

35. William Gesenius, A Hebrew and English Lexicon of the Old Testament, p. 910.

36. John Davis, "Cassia," A Dictionary of the Bible, p. 123.



#5. Stacte

The Greek word "stacte" indicates a substance which flows out in drops. Many exegetes identify it with the Styrax officinalis of Asia Minor. This is a small shrub emitting fragrant resin.<sup>37</sup>

#6. Galbanum

It seems to have come from two Persian plants, the Ferula galbaniflua and the Ferula rubricaulis,<sup>38</sup> which produced a gum-like substance. "It is a greasy, sticky, granulated resin, presenting a whitish appearance at first, but afterwards changing to yellow, and having a pungent odor and taste, and which, when mixed with fragrant substances, has the effect of increasing the odor and fixing it longer."<sup>39</sup>

#7. Frankincense

"Frankincense" was an aromatic, a gummed resin from the frankincense tree. The finest quality had a white color, and when dried, gave off a balsamic odor. People of antiquity knew four species of this spice, two of which were grown in India, one on the Somali coast of

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37. John Davis, "Stacte," op. cit., p. 742.

38. John Davis, "Galbanum," op. cit., p. 1143.

39. Carl Friedrich Keil, Manual of Biblical Archeology, vol. I, p. 121.



Africa, and one on the southern coast of Arabia.<sup>40</sup>

Often the question is raised where did the Israelites obtain all these spice rarities and treasures when the spice countries were thousands of miles away? Unhesitatingly we answer, "Egypt!" Archeological evidence supports the Bible statements that the Israelites were able to acquire these spices in Egypt. A minute investigation of Egyptian <sup>m</sup>ummies and relics shows that these spices were in use.<sup>41</sup> The eastern merchants, "wise men from the east," traded with the Egyptians in these goods.

### 3. Materials from the Animal Kingdom

The animal kingdom contributed abundantly materials for the Sanctuary. From the zoological realm the Israelites offered "onycha" (Ex. 30,34), "blue, purple, and scarlet" (Ex. 25,4), "goats' hair" (Ex. 25,4), rams' skins dyed red and badgers' skins." (Ex. 25,5.)

#### a. Onycha

"Onycha," onyx according to the nominative form, was one of the ingredients mixed in the sacred incense.

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40. John Davis, "Frankincense," A Dictionary of the Bible, p. 240.

41. Jamieson, Fausset, and Brown, A Commentary of the Old Testament, vol. I, p. 403.



This substance was taken from the operculum (lid covering the opening of the shell) of a shell mollusc called the Strombus or wing-shell. It thrived in large numbers in the Mediterranean and Red Sea.<sup>42</sup>

b. Dyes

#1. Blue

It seems to have been a violet purple dye as distinct from "purple." The colored substance was procured from a shellfish, the Helix Ianthina, whose habitat was on the rocky coastline of Phoenicia.<sup>43</sup>

#2. Purple

The color was rather reddish purple. This precious dye was obtained near Tyre from a shellfish, Murex trunculus.<sup>44</sup> The substance for the dye was taken from the secretion gland in the neck. The slimy fluid was white until exposed to the sunlight. The Phoenicians developed the purple dye industry to a high degree and supplied the Mediterranean markets.

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42. James Hasting, "Onycha," A Dictionary of the Bible, vol. III, p. 624.

43. G. W. Thatcher, "Color," op. cit., vol. I, p. 457.

44. Charles Randall Barnes, The People's Bible Encyclopedia, p. 220.



### #3. Scarlet

The original words read, "crimson-worm." The Septuagint translation designates that the source of the dye was Coccus ilicis, an insect called Kermes. The female insect attached herself to the leaves and twigs of the oak, formed a lump growth about the size of a pea, and survived on the juices. She was violet-black, without wings, and was filled with red eggs. The insect abounded chiefly in Palestine and Asia Minor.<sup>45</sup>

### #4. Red

The Hebrew word דָּם designates the red color of blood, perhaps dark red. The source of the red pigment is unknown.

### c. Goats' Hair

The goats of the Israelites were closely related to the sheep. There were a few points of difference: the goats' horns turned backwards; they had different habits. These goats belonged to the Capra mambrica family.<sup>46</sup> Their ears hung down one foot below their horns. Their hair was brownish black and possessed a waterproofing

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45. G. W. Thatcher, "Color," A Dictionary of the Bible, vol. I, p. 457.

46. John Davis, "Goat," A Dictionary of the Bible, p. 263.



quality. This hair was gathered and woven into durable cloth which resisted moisture and rendered warmth.

St. Paul used this same material in his tent business.

(Acts 18,3.) The Bedouins of the desert to this day use goat-hair fabric for tents.

#### d. Hides

##### #1. Rams' Skins

The rams were the male of the sheep. The females were not used for marketing. The Hebrews herded them in Egypt before leading them into the wilderness. (Ex. 10,9.) These sheep belonged to the Ovis laticaudata family and were bred from early times.<sup>47</sup> A physical character of special interest was their fat tails which ordinarily weighed from ten to fifteen pounds. The "rams' skins" were used as a covering on the Tabernacle. The wool was removed from the hide by means of lime, and a tincture preparation of oak bark made the hide pliable and durable through the acid action of the juice.<sup>48</sup>

##### #2. Badgers' Skins

God asked the Israelites to offer their "badgers"

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47. John Davis, "Sheep," op. cit., p. 706.

48. John Davis, "Tanner," op. cit., p. 759.



skins." The people used this material for making shoes (Ezek. 16,10), but the Lord had a greater need for it. We would say that He asked for the shoes from off their feet; however, He supplied this need by preventing their shoes from wearing out. (Deut. 29,5.) God planned to use their "badgers' skins" for the Tabernacle as an outer protection against the bright sun and soiling rain.

The source of these skins has been a problem. The Septuagint renders the translation as "red skin," designating a color rather than an animal. The Talmudists almost unanimously hold that שִׁנְיָא refers to an animal. It is true that the common badgers, Meles vulgaris, did exist in Palestine.<sup>49</sup> There is a probability that they might have inhabited the Sinai Peninsula. The Arabs employed the term tuchas in referring to sea animals. It signified either the dolphin (sea cow), porpoise (related to the sea cow), halicore (dugong), or phoca (seal).<sup>50</sup> These animals were found in the Red Sea. On the Hebrew word שִׁנְיָא Gesenius and Edward Robinson have this to offer: "\_\_\_ But not improbably the Hebrews designated under this one name both the seal, the badger, and also other like animals which they did not know nor distinguish

49. John Davis, "Badger," op. cit., p. 72.

50. Charles Randall Barnes, The People's Bible Encyclopedia, p. 53.



accurately. — Thus far Gesenius, whose arguments on this difficult topic it has seemed better to let stand. But though it were admitted, that seals and dolphins might have been called by one name, yet it is scarcely credible that the badger should be included under the same;..... That the ancients covered their tents with seal-skins in order to protect them from lightning, is related by Pliny, H.N. 2. 56, comp. Plut. Symp. 5. 9. Sueton. Octav. c. 20. And as a finer kind of shoes can be also made of skins of this sort (Ez. 1. c.) it seems probable that the seal is the animal intended.——<sup>51</sup> Keil discovered that the halicore skin would also serve the purpose well. Some argue that it is too thick, tough, and coarse to be suited for the ornamental sandals of women, but Keil shows that the halicore skin formed in two layers, an upper and lower. The upper layer was well adapted for the covering of the Tabernacle, the lower layer for delicate sandals.<sup>52</sup>

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51. William Gesenius, A Hebrew and English Lexicon of the Old Testament, p. 1127.

52. Jamieson, Fausset, and Brown, A Commentary on the Old Testament, vol. I, p. 384.



## CHAPTER IV

### ENGINEERS AND BUILDERS

As we have seen in a previous chapter, God drew up the plans for the Sanctuary of Israel and revealed them to Moses so that the people could carry them out. God, through Moses, sent His plan from Sinai down to the people at the foot of the Mount. God outlined preparations for the building project and assigned specific men of ability to accomplish His work. God knew too, that Moses would not be able to superintend the work in person because of his many duties connected with the spiritual welfare of the people. Therefore, "He chose by name Bezaleel and Aholiab,"—men well qualified to execute God's plan. (Ex. 31, 2.6.)

#### 1. Superintendent Bezeleel

Bezaleel ('under the protection of God') was made

the supervisor of all the work. He was the son of Uri and grandson of Hur, a patriarch who had been associated with Aaron during the absence of Moses. (Ex. 17,12.) He stemmed from the highly honored tribe of Judah. Bezaleel was a man of ability, a skilled artisan, who consecrated his talents to the service of the Lord. He was entrusted with the responsibility of directing the work so that every detailed job would meet the specification of the divine pattern. The fact that God always finds capable leaders through whom to accomplish His ends is again here evidenced in the choice of Bezaleel. For he indeed was able to carry the responsibilities for so great a task!

## 2. Chief Assistant Aholiab

God also provided Bezaleel with an assistant. He appointed Aholiab to serve in this capacity. Aholiab belonged to the tribe of Dan and was the son of Ahisamach. Aholiab came from one of the minor tribes. He was not a man of renowned parentage but represented a lower class of Hebrew society. He, like Bezaleel, possessed ability and skills which he had acquired as a craftsman in Egypt.

## 3. Wise-hearted Men and Women

There was a job for every volunteer worker. But in order to equip each volunteer with the knowledge and



skill of a first-class artisan, the Lord filled Bezaleel and Aholiab with wisdom so that they might use their genius to teach others the skill which they had learned. Under these supervisors both men and women willingly offered their services to the Lord. Among these there perhaps were many who had been unable to contribute earthly goods but were glad to offer their efforts, labors, and talents. The artistic work which the Sanctuary required presented an opportunity for every man and woman who had pursued specialized trades in Egypt. For the spinner there were fibers to spin; for the dyer there were threads to dye; for the weaver there was yarn to weave; for the tanner there were hides to cure; for the woodcraftsman there was lumber to work; for the smith there were castings to mold and plating to do; and for the engraver there were precious stones to cut. Every artisan had a job.

#### 4. Egyptian Influence on the Builders

These artisans came from the land of Egypt. This land proved to be a training camp for the builders of the Sanctuary. The Egyptians needed workmen, and in order to obtain enough craftsmen to occupy the work benches, forge the metals, and manipulate the looms, they engaged slave laborers to work in their shops. Among many of these



laborers were Hebrews who helped produce many pieces of fine art. Certainly the builders of the Sanctuary were influenced by Egyptian art from the pre-Exodus ages.

#### a. Skilled Metallurgists

The Egyptians' skill in the field of metallurgy is unsurpassable. "Nothing can surpass the gold work of the Egyptians in the art of jewelry found at Dahshur."<sup>1</sup> At the great museum at Cairo there are two gold necklaces of the finest workmanship: the one has a delicate butterfly design; the other has three small eight-pointed stars. Another piece of curious work on display is a dagger with a heavy gold socket, a hilt studded with precious stones, and a crescent-shaped pommel of lapis lazuli. Here is also an astonishing display of hawk breastpins which are only one and a half inches in size. Each feather is a separate gem set in gold. The breastplates, however, surpass all articles in the cases. Their bases are castings of solid gold, and on their convex faces are bird and flower designs skillfully inlaid with precious stones.<sup>2</sup> "The Egyptians possessed all the knowledge necessary for manipulating gold: gilding, hammering gold threads, etc."<sup>3</sup> A coffin from the tombs of the kings, having five

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1. G. A. Frank Knight, Nile and Jordan, p. 175.

2. Melvin G. Kyle, The People's Bible Encyclopedia, p. 1207.

3. G. A. Frank Knight, Nile and Jordan, p. 175.



sides faced with beaten plates of gold, can be seen at Cairo.<sup>4</sup> From such plates wires were cut, hammered, rolled into cylindrical shape, and embroidered into blue, purple, and scarlet fabrics. Petrie shows that the Egyptians rolled gold thread out of strips cut from sheets and contends that the gilding of the tabernacle boards must have been accomplished by the usual Egyptian method of sticking thick gold-foil firmly to the wooden base.<sup>5</sup> The Egyptians also excelled in producing other metals. They developed a process of refining and tempering copper which no modern ingenuity can reproduce. This knowledge must have had a great influence on the builders of the Sanctuary.

#### b. Skilled Cloth Manufacturers

The Egyptians possessed a remarkable knowledge and skill in manufacturing fine cloth. Wilkinson informs us that the Egyptians made it a practice to dye the yarn before weaving it into cloth.<sup>6</sup> They dyed with red and blue dyes several thousand years before the Christian era.

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4. Melvin G. Kyle, The People's Bible Encyclopedia, p. 1206.

5. W. M. Flinders Petrie, "Goldsmith," A Dictionary of the Bible, vol. II, p. 226.

6. James Hastings, "Dyeing," op. cit., vol. I, p. 631, from Wilkinson, Ancient Egypt, II, p. 166, ed. 1878.



Their tombs revealed beautiful indigo-blue garments.<sup>7</sup> In the Cairo museum one can still see pieces of embroidery work in blue which has been preserved for three thousand five hundred years.<sup>8</sup> "Fabrics found in the tombs of Egypt prove that those who dyed them must have been experts in the application of substances which do not immediately reveal their colouring power."<sup>9</sup> Pliny reports that the Egyptians were the inventors of weaving.<sup>10</sup> Breasted's statement coincides nicely with Exodus 35,25 when he says, "The women of the serfs on the great (Egyptian) estates were the spinners and weavers."<sup>11</sup> We know that in Israel good housewives were engaged in cloth manufacturing. (Prov. 31, 21-25.)

### c. Skilled Tanners

Already early in history the Egyptians developed highly the leather industry. "Flinders Petrie says that red-dyed leather was made in Egypt before B.C. 3000."<sup>12</sup>

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7. G. A. Frank Knight, Nile and Jordan, p. 176, from Wilkinson, ii, p. 164.

8. Melvin G. Kyle, The People's Bible Encyclopedia, p. 1207.

9. Encyclopaedia Britannica, "Dying," vol. 7, p. 789.

10. G. A. Frank Knight, Nile and Jordan, p. 176, from Pliny's Historia Naturalis, ii, p. 56.

11. James Henry Breasted, A History of Egypt from Earliest Times, p. 98.

12. G. W. Thatcher, "Color - 'Red'," A Dictionary of the Bible, vol. I, p. 457.



This process is depicted on Egyptian monuments.<sup>13</sup> The Egyptians removed the hair from the hides with lime solution or the acid juices of the Peripoloca secamine, a desert plant. For three days they treated the skin with flour and salt and scraped away the fat and waste materials. The stalk of the Peripoloca secamine they mixed in water and applied this tincture to the inner surface of the skin. This caused the hairs to loosen. Then they dried the skin from two to three days. They tanned the leather with the pods of the Sunt or Acacia nilotica or leaves of certain species of the Sumac, Rhus coriaria or Rhus oxycanthoides.<sup>14</sup> Herodotus states that the Libyan tribes of North Africa were skilled in this art.<sup>15</sup> In Egypt "the tanner had thoroughly mastered the art of curing the hides, and produced fine soft skins, which they dyed in all colours, covering stools and chairs, beds and cushions, and furnishing gay canopies and baldachins."<sup>16</sup>

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13. G. A. Frank Knight, Nile and Jordan, p. 176, from Wilkinson, Ancient Egypt, II, p. 186.

14. James Hastings, A Dictionary of the Bible, vol. IV, p. 677.

15. G. A. Frank Knight, op. cit., p. 176, from Herodotus, IV, 189.

16. James Henry Breasted, A History of Egypt from Earliest Times, p. 96.



#### d. Skilled Carpenters

The Egyptians were also woodcraftsmen. From the Acacia seyal timbers they carved the doors of temples, built sacred boats, and made the royal furniture.<sup>17</sup> One exhibit in the Cairo museum furnishes an amazing example of Egyptian workmanship. This exhibit, which attracts every traveller's eye, is a great carved door with horizontal panels. "The lowest panel is a series of representations of doors; the next above is made up of alternating groups of ornamental hieroglyphs; and above these are two larger panels of scenes of the king himself, ThothmesII, surrounded by his names and titles, and delicate tracery of the birds and animals and flowers of the hieroglyphs brought out in all the rounded softness of low relief, the most difficult and beautiful of all carving."<sup>18</sup> The collection of wooden statuary shows in general the remarkable ability with which the Egyptians applied their tools.

We see, then, that God had His purpose for bringing the Hebrews directly into contact with Egyptian art.

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17. G. A. Frank Knight, Nile and Jordan, p. 177.

18. Melvin G. Kyle, The People's Bible Encyclopedia, p. 1206.



Through such contacts God, in view of His plans, was preparing skillful workers who would perform the great task of building His Sanctuary. In Egypt the Hebrews learned their trades; in Egypt they acquired their skills. Certainly this is one aspect of their enslavement which shows that God meant it for Israel's good.



## CHAPTER V

## THE CUBIT MEASURE

It is obvious that before we are able to draw any plan of a structure, we must decide on a scale of measurement to which such a drawing will conform. The measurement of the Court, Tabernacle, and furniture were given in terms of cubit-lengths. This measure has been and still remains a problem for Bible students. The English language took the word cubit directly from the Latin cubitum. The Latins adopted this word from the Septuagint *Κύβιτος*. All three words have an identical meaning — "an elbow or elbow-length." Transliteration was forced upon the translators. They had no adequate word to express the original concept. The Hebrew word for cubit meant nothing more to the translators than ?????????? — unknown length. We may draw a parallel with the word Blitzkrieg. This



German word cannot be adequately translated into the English language. For this reason the original form Blitzkrieg is transliterated directly into the English in order to preserve the force of its original meaning. How many English speaking people use this term without knowing its original meaning only to reflect a contemptible denunciation on the Nazi military tactics. By the same development the term cubit came to be used only to reflect a measure without knowing its exact length. The dictionaries give us little help. All that the Hebrew term אֵלֶּכָּח ("cubit") can mean is: in a few instances, "foundation" and "metropolis"; more specifically, "forearm"; and for length, "cubit." But this does not settle the problem of a cubit-length.

### 1. Historical Resume of the Cubit

The derivation of some of the standard measurements among the Hebrews is indeed interesting. In our present discussion we are concerned only with the small linear measures. The terms for these linear measures were taken from parts of the human body. The "finger" (Jer. 52,21), although it does not enter into the measurements of the Sanctuary, was the smallest unit of measure and equalled the breadth of a human finger; the "handbreadth" (Ex. 25, 25) equalled the width of the palm or four fingers of



equal size; the "span" (Ex. 28,16) equalled the distance of the outstretched hand from the tip of the little finger to the tip of the thumb; and the "cubit" (Ex. 25, 10) equalled the length of the forearm or the distance from the end of the elbow to the tip of the index finger. Now we may set up a relative table which would read as follows:

4 fingers	== 1 handbreadth
3 handbreadths	== 1 span
12 fingers	== 1 span
2 spans	== 1 cubit
6 handbreadths	== 1 cubit
24 fingers	== 1 cubit

When we compare these relative measures on normally proportioned individuals, we find the ratios to figure out perfectly.

The cubit was a standard measure not only among the Hebrews but also among the Egyptians and Babylonians. The Egyptians had two cubit-lengths. The 'moderate' Egyptian cubit, as Herodotus states,<sup>1</sup> contained six handbreadths. The 'royal' Egyptian cubit was a handbreadth longer than the 'moderate' cubit.<sup>2</sup> From a measuring stick found in the kings' tombs, it is quite likely that the

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1. John Davis, "Cubit," A Dictionary of the Bible, p. 155, from Herodotus, ii, 149.

2. John Davis, "Cubit," op. cit., p. 155.



'royal' Egyptian cubit measured 20.64 inches.<sup>3</sup> Wilkinson believes that the Egyptians used only one cubit of uniform length as their standard measure. He made careful measurements in Egypt on the basis of cubit records and fixed the Egyptian cubit at 20.625.<sup>4</sup> But what would prevent this figure from equalling only the 'royal' cubit?

The Babylonian system of measurement was similar to the Egyptian system. The Babylonian system also operated with two standards. Archeological discoveries show us that the 'moderate' Babylonian cubit was 20.65 or 21.26 inches long.<sup>5</sup> There seems also to have been a "royal" Babylonian cubit which was three fingerbreadths longer than the 'moderate' cubit.<sup>6</sup> This would make the total length of the 'royal' cubit 23.23 or 23.91 inches. It is quite possible that the 'royal' Egyptian cubit and the cubit of Ezekiel (Ezek. 43,13) were theoretically equal to the 'moderate' Babylonian cubit.

## 2. Caldecott's Cubit

In discussing the Babylonia cubit we cannot pass

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3. John Davis, "Cubit," op. cit., p. 155.

4. Charles Randall Barnes, "Cubit," The People's Bible Encyclopedia, p. 710, from Wilkinson, Ancient Egypt, II, p. 257.

5. John Davis, "Cubit," A Dictionary of the Bible, p. 155.

6. John Davis, "Cubit," op. cit., p. 155, from Herodotus, I, 178.



over the investigation of Rev. W. Shaw Caldecott. His basis of establishing the cubit of Moses rests on two ancient inscriptions, the Senkereh Tablet and the Scale of Gudea.

In 1850 Mr. W. K. Loftus discovered some baked clay tablets in a number of tombs at Senkereh, a small Arabian village in southern Babylonia.<sup>7</sup> One of these tablets, dating back to 3000 B.C., bears Cuneiform impressions of a table of squares. Inscriptions appear on both sides of the tablet. On the reverse side are squares and cubes perfectly preserved; the fractions and multiples on the obverse side are however imperfectly preserved. Sir Henry Rawlinson worked on the fragmentary obverse side and attempted to restore some of the missing figures. Caldecott supplied those figures which Rawlinson did not restore.

Mr. E. de Sarzec, a French explorer, excavated at the sight of ancient Lagash (Telloh), one hundred and thirty miles southeast of Babylon. In 1881 he found there nine headless statues of diorite (a black stone as hard as granite). One of these statues represents the Sumerian patesi (king) Gudea in the act of worshipping his god.

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7. W. Shaw Caldecott, The Tabernacle, Its History and Structure, p. 118ff.



His hands are folded in prayer, and on his knees lies a slab of stone. On this slab the ground plan of a palace and a scale of measurements appear. The scale, engraved on the outer edge of the slab, shows two lines bisected with regular marks to indicate units of measure. It is unfortunate that two corners of the slab have been broken off and lost. Its discoverer, as well as Professor Hommel, have attempted to reproduce the missing parts. Caldecott added his conjectures to the suppositions of these men.

Rev. Caldecott, by using the Senkereh Tablet and Gudea Scale, bases his conclusions for the measurements of the sacred buildings of the Jews upon the practice of the Mesopotamians. "There were in common and everyday use in Mesopotamia three 'ells' or cubit-lengths, each of which was applied in a specific and separate department of trade and human interest."<sup>8</sup> This discovery was announced by the Royal Asiatic Society in December of 1902.<sup>9</sup> In the Quarterly Statement of the Palestine Exploration Society (January, 1902) the following conclusion appeared: "There were three cubits of the respective length of 9/10, 12/10, and 15/10 of an English

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S. W. Shaw Caldecott, op. cit., p. 161.

9. W. Shaw Caldecott, op. cit., p. 161, from "The Linear Measures of Babylonia about B.C. 2500," Journal of the Royal Asiatic Society, (April, 1903), pp. 257-283.



foot, the first of which was used exclusively for gold and gold-tapestry work, the second for building purposes, and the third for measuring areas only."<sup>10</sup> Mr. S. Wiseman, of the English Mission Hospital in Jerusalem, issued the statement in 1904: "About fifty years ago there were actually three different cubits or 'dira' (arm) in ordinary use in Palestine."<sup>11</sup> They were a) the dirā baladi, the measure for linen manufactured in Egypt, which equalled  $22 \frac{2}{3}$  inches, b) the dirā Istambouli, the cubit of Constantinople for measuring European cloth, which equalled  $26 \frac{1}{2}$  inches, and c) the land dirā, the cubit for land measurements, which equalled 30 inches. So we see that the system of linear measurements in ancient Mesopotamia and modern Palestine together with the Senkerah Tablet and Gudea Scale govern Caldecott's judgments in establishing the cubit of the Sanctuary at Sinai. By means of these sources Caldecott employs three different cubit-lengths in reconstructing the Sanctuary:

- "a) Cubit used in the plotting of the Tabernacle Court, 1 ft. 6 ins.
- b) Cubit used in the erection of the Tabernacle and Tent,  $1 \frac{1}{5}$  ft.
- c) Cubit used in the making of the gold-embroidered Veil and the ten Curtains, 10.8 inches."<sup>12</sup>

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10. W. Shaw Caldecott, op. cit., p. 161.

11. W. Shaw Caldecott, op. cit., footnote 2, p. 161.

12. W. Shaw Caldecott, op. cit., p. 165.



Most Old Testament scholars do not recognize Caldecott's findings of 1906 as scientific. How shall we evaluate his conclusions? First of all, he proves to be unscientific by the way in which he tries to invent a soreg or fence. He sees a soreg in Numbers 18, 22-23: "Neither must the children of Israel henceforth come nigh the tabernacle of the congregation, lest they bear sin, and die. But the Levites shall do the services of the tabernacle of the congregation, and they shall bear their iniquity: it shall be a statute for ever throughout your generations; that among the children of Israel they have no inheritance." From these passages Caldecott deducts a partition fence which divided the Court into two equal parts. He imagines an erected physical barrier. He himself admits that in Scripture the soreg "comes into view, not clearly, but dimly."<sup>13</sup>

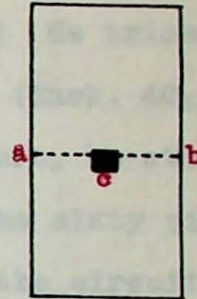


Fig. A. a to b, Soreg  
c, Altar

Secondly, he is unscientific because he invents a north gate. He deducts this creation from the premises that according to the Levitical Law the priest "shall lay his hand upon the head (taken as cattle) of his

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13. W. Shaw Caldecott, op. cit., p. 174.



offering, and kill it at the door of the tabernacle of the congregation," (Lev. 3,2); "He shall lay his hand upon the head (taken as sheep and goats) of his offering, and kill it before the tabernacle of the congregation," (Lev. 3,8); and "He shall kill it on the side of the altar northward before the Lord." (Lev. 1, 11a.) He tries to support his argument with Ezekiel's Temple (Ezek. 40,39-40), planned some 800 years later. Furthermore, he states that mathematics demands a north gate. "The sixty pillars around the court left a vacancy of one in the circuit....  
 .....caused by the inability to use a sixty-first pillar."<sup>14</sup>  
 He admits that this hiatus is not directly referred to in the Book of Exodus.

Thirdly, Caldecott's conclusions as to the true length of the cubit are unscientific because they rest on many conjectures. In the case of the Senkereh Tablet, it is true that two hundred eighty-five separate characters are preserved, but almost an equal number had to be added. In the case of the Gudea Scale, portions of the scale are broken off, and again suppositions had to be made.

Fourthly, Caldecott seems to disregard certain facts. He seems to disregard the fact that the four hundred

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14. W. Shaw Caldecott, op. cit., p. 172.



thirty year sojourn in Egypt had a direct influence on the Israelites. Knight, in his chapter entitled "Egyptian Influence," subscribes to Professor Kennedy's conclusion: "The Hebrews used the Egyptian not the Babylonian cubit for measurement."<sup>15</sup> It also seems that Caldecott disregards the difference between the Hebrew "cubit" (Ex. 25,10) and the Hebrew "cubit and an hand breadth" (Ezek. 40,5; 43,13) and intends to use his triple cubit measure for all the sacred edifices of the Jews.<sup>16</sup> Certainly we would not subscribe to such an arbitrary cubit.

### 3. The Hebrew Cubit

The old Hebrew cubit presents a difficult problem. This problem exists because the Bible records no scale of distances or gives no figures for the length of the cubit. The writer of Exodus does not deem it necessary to give the exact numerical value of a cubit. A cubit-length in the days of Moses was common every-day knowledge. When we speak of a pound of gold, do we always modify its weight by adding that it should not be figured according to the sixteen ounce avoirdupois standard but rather according to the twelve ounce troy standard; or

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15. G. A. Frank Knight, Nile and Jordan, p. 173.

16. W. Shaw Caldecott, The Tabernacle, Its History and Structure, pp. 164-165.



when we speak of a foot, do we always stipulate its equivalence to twelve inches?

No verbal description of the Sanctuary can replace the accuracy of measurement which an actual blueprint would give. Without a blueprint or without a figure expressly qualifying the cubit we are not able to know exactly the length of the old Hebrew cubit. No one up to the present time can prove conclusively that he knows its exact length. We shall however aim to gain a composite picture and accurate proportion by working with the cubit. We shall estimate our cubit-length by drawing our conclusions from the best available sources and the most convincing judgments.

Like the Babylonians and Egyptians, the Hebrews also had a two cubit standard. It is evident that there was an 'old (moderate) cubit' before the Exile and a 'great (royal) cubit' after the Exile. The measure of Moses was the 'old cubit' or "cubit of a man" (Deut. 3,11), and the measure of Ezekiel was the 'great cubit'. Ezekiel described the 'great cubit' as "a measuring reed of six cubits long by the cubit and an hand breadth," (Ezek. 40,5); or "The cubit is a cubit and an hand breadth." (Ezek. 43,13.) The Chronicler of Solomon's



day recognized a two cubit standard among the Hebrews by writing: "The length by cubits after the first (older) measure." (2 Chron. 3,3.) The 'moderate' Hebrew cubit measured two spans,<sup>17</sup> and the 'royal' Hebrew cubit measured two spans and a handbreadth. The former measure is the cubit of the Sanctuary, since Ezekiel lived some eight hundred years after the time of Moses.

If we could be certain of the exact length of any one of the old Hebrew measures, whether a span, handbreadth, or finger, the cubit could then be easily determined. Many archeologists have made comparisons in measuring distance and objects in order to arrive at the length of a 'moderate' Hebrew cubit. Several examples can be given as to how these archeologists gather their information.

First, The Siloam Inscription was found which relates that "the waters flowed from the outlet (of the spring) to the Pool (of Siloam) 1200 cubits."<sup>18</sup> Mr. Conder measured this distance and found it to be 1758 feet. This figure made the cubit 17.58 inches long. The 1200 cubit figure, it is believed, specified the

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17. William Whiston, The Life and Works of Flavius Josephus, Antiquities, bk. III, ch. vi, par. 5.

18. A. R. S. Kennedy, "Cubit," A Dictionary of the Bible, vol. IV, p. 907.



length of the aquaduct only in round numbers; thus, the cubit length could be figured from it only in approximate distance.

The second example comes from Josephus.<sup>19</sup> He gives the distance of the "Sabbath day's journey" as 3000 Greek feet (Roman Attic feet). Jewish legislators report this measure as the distance between Jerusalem and the Mount of Olives or 2000 Hebrew cubits. Mr. Dörpfeld measured this distance very carefully and found the cubit to be 17.47 inches long.

Petrie proceeded to discover the exact length of a cubit by measuring the bases of Egyptian tombs, and after making many comparisons, he decided that the Hebrew cubit is equal to 22.6 inches.

A table is the best means by which to present the approximations of the 'moderate' Hebrew cubit.

AUTHORITY	CUBIT LENGTH
Conder.....	16 inches
Dörpfeld.....	17.47 "
Mishna (not too accurate).....	17.5 "
Conder.....	17.58 "
Kennedy.....	17.68 "
Watson.....	17.70 "
Beswick.....	17.72 "
Warren.....	17.75 "
Wilkinson (Strong).....	20.63 "
Petrie.....	22.6 "

19. A. R. S. Kennedy, "Cubit," A Dictionary of the Bible, vol. IV, p. 907.



One notices the differences in the estimates of the cubit. No two authorities arrived at the same conclusion. An approximate average would be about eighteen inches. Thus, for the sake of convenience we shall use this round number of inches, without violating conservative accuracy, in order to give a correct proportion of the Sanctuary. With this figure agreed upon, we shall now proceed to reconstruct the Court, Tabernacle, and furniture of the Sanctuary.



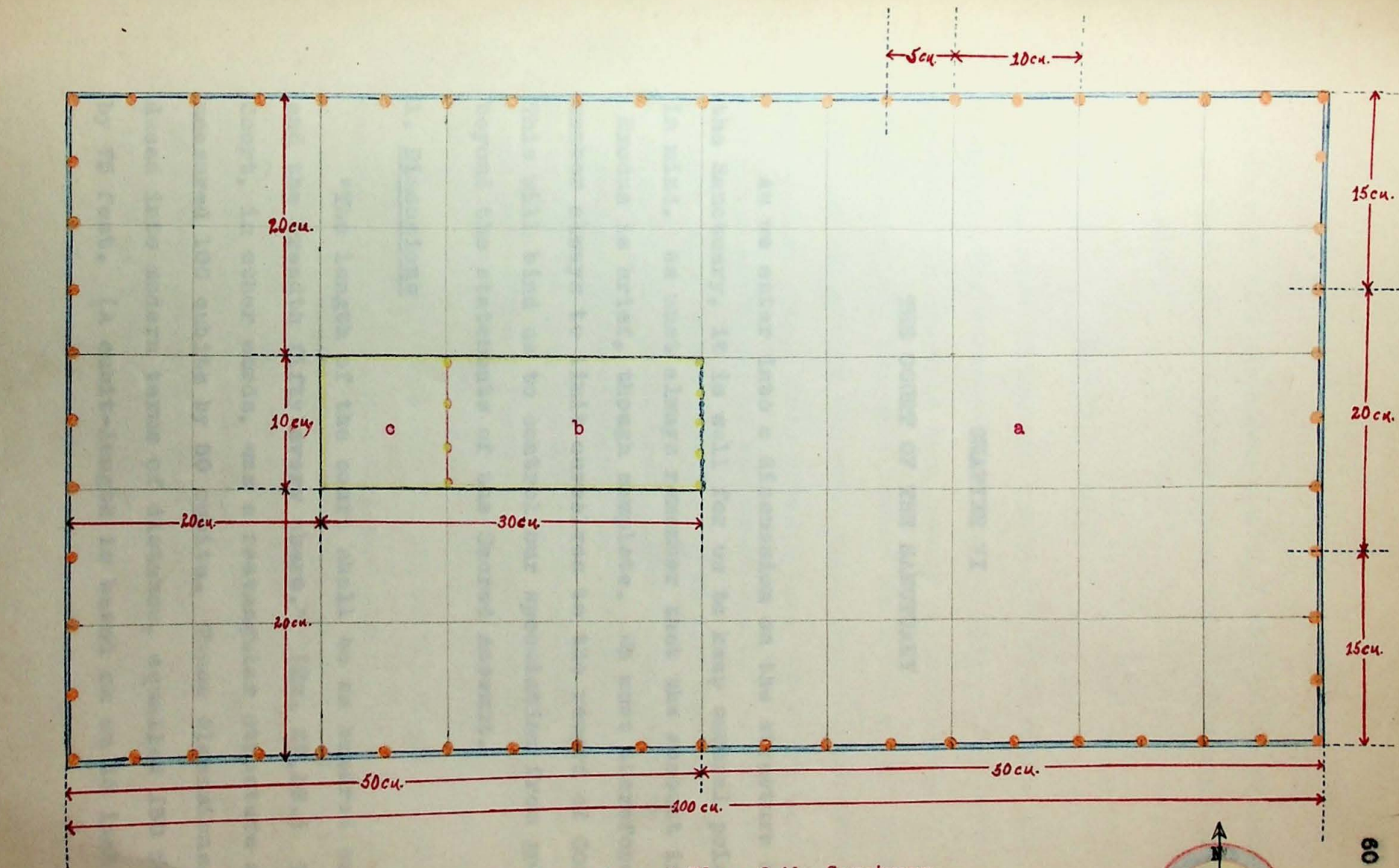
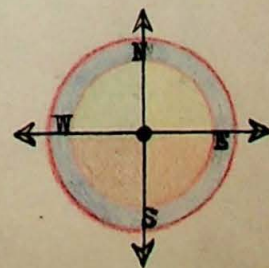
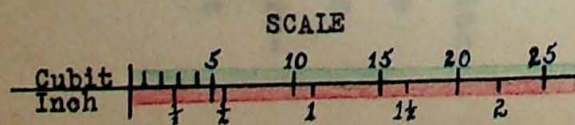


Fig. B. A Ground Plan of the Sanctuary

- a. Court
- b. Holy Place
- c. Most Holy Place





## CHAPTER VI

### THE COURT OF THE SANCTUARY

As we enter into a discussion on the structure of the Sanctuary, it is well for us to keep several points in mind. We must always remember that the account in Exodus is brief, though complete. We must therefore remember always to limit ourselves to the record of God. This will bind us to control our speculation from going beyond the statements of the Sacred Account.

#### 1. Dimensions

"The length of the court shall be an hundred cubits, and the breadth fifty every where." (Ex. 27,18.) The Court, in other words, was a rectangular structure and measured 100 cubits by 50 cubits. These dimensions, reduced into modern terms of distance, equalled 150 feet by 75 feet. (A cubit-length is based on an 18 inch



standard.) The perimeter totalled 300 cubits or 450 feet. This area contained about three-eighths of an English acre.

## 2. The Pillars and their Parts

"Pillars" formed the framework of the Court enclosure. The arrangement of these pillars has been a problem. We are told that twenty pillars bounded the north side, and the same number the south side. There were ten pillars on the west side, and the same number on the east side. This gives a total of 60 pillars. Since the perimeter of the Court was 300 cubits, the pillars were spaced 5 cubits or  $7\frac{1}{2}$  feet apart. The problem of the pillar arrangement becomes apparent when we examine the requirements for the east side and the gate. At the gate stood four pillars (Ex. 27,16), and there were three pillars on either side of the gate. (Ex. 27,14-15.) The only possible arrangement for the 60 pillars is illustrated in figure B. There we see eleven pillars bounding the east side. All of these figures will best harmonize with the biblical account if we maintain that the four corner pillars (fig. C, a and d) and the two end pillars of the gate (fig. C, b and c) were considered half-pillars. That means that one-half of a corner pillar is considered to be a part



of one side of the Court, and the other half is figured as belonging to the other side. This applies also to the end pillars of the gate. (Fig. C.) This manner of figuring satisfies all mathematical requirements given in Exodus.

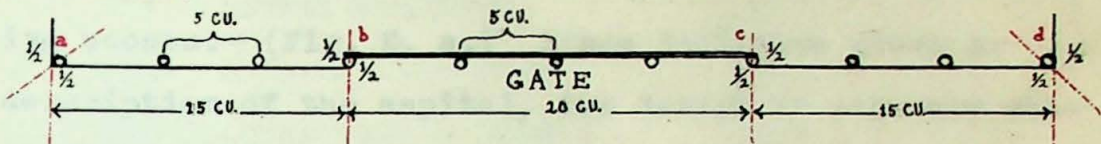


Fig. C. Pillar Arrangement on the East Side.

The Bible does not record all of the material from which the pillars were made. We are told that they were "filleted with silver" (Ex. 27,17), that is, a silver plating covered the exposed parts of the wood. We have just reason to believe that the base of the plating was shittim wood since the pillars of the Tabernacle proper had this base. (Ex. 26,32.) We may picture the pillars of the Court as round fence posts about 5 inches thick.<sup>1</sup> They undoubtedly were carved from round timbers of the shittim tree.

#### a. Chapters

To the top of each pillar was attached a "chapter"

1. James Strong, The Tabernacle of Israel in the Desert, p. 13.



or capital. The capital was made of silver (Ex. 38,17) and provided a covering so that the rain could not penetrate into the end of the post. No doubt it also served as an ornamentation. It may be that the cords were fastened around the depression of the capital by hitching nooses. (Fig. D, a.) Since Scripture gives no description of the capital, its design is entirely subjective. We do know that each capital was plated with silver. (Ex. 38,17.)

#### b. Fillets

The old view held that the fillets were rods which joined the pillars together, but there is little proof to speak in favor of this interpretation. The root for the Hebrew term is  $\text{פִּי} \text{וּ} \text{נִ}$  and means "to join or fasten together; to be attached or cleave." The Aramaic language employs this same word to designate the saddling of an ass. The joining or connecting effect of saddling resulted after the girth was drawn tight. The girth was the strap or band which was bound around the animal's abdomen and served the purpose of attaching the saddle firmly to the animal's back. This etymological meaning supports the interpretation that the fillet was a band which connected the capital securely to the pillar. In no way does this interpretation violate the sense of the



Hebrew. This band joined and connected; it caused two parts to be attached. The band joined the capital and pillar firmly together as one so that they might withstand the tension of the cords or stay-ropes.

The internal evidence of Scripture favors the view that the fillets were a part of the pillars. (Fig. D.) In the account of the transportation of the Sanctuary no provisions were made to transport the fillets. (Num. 3, 27.) We know from the very nature of the hooks and the capitals that they were permanently attached to the pillars; therefore, they required no special provisions for transportation. Since no transportation provisions were made for the fillets, they must have also been a part of the pillar.

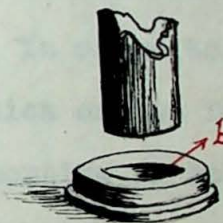


Fig. D. Pillar of the Court.

#### c. Hooks

The "hook" was another permanent part of the pillar.



We are able to find out the shape of such a hook because the Hebrew called it vav which is the name of the Hebrew letter 'Y'.<sup>2</sup> Each hook, resembling the shape of the character, was made of silver (Ex. 27,17) and driven horizontally into each pillar just below the band. (Fig. D.) From these hooks the curtains were suspended.

### 3. Sockets

The "socket" or pedestal served as the base of the pillar. The pedestal was not permanently joined to the pillar. Each pillar rested on a pedestal which was made of copper. The pedestal under the pillar served the same purpose as the flat foot of the camel serves in sandy regions. It provided a foundation which would not readily sink into the sand. In order to keep the lower end of the pillar in position on its foundation, a design no doubt called for a mortise or hole in the center of the pedestal. (Fig. D,b.)

### 4. The Curtain of the Court

The cloth for the curtain of the Court was woven from white cotton yarn. This durable fabric was sewed together lengthwise in order to form a continuous screen which extended from the left gate pillar around the Court to the right gate pillar. The length of the curtain was



420 feet, and its width was 5 cubits or  $7\frac{1}{2}$  feet. The curtain was hung on the hooks outside of the pillars by means of eyelets. (Fig. E, a.) These eyelets were sewed into the top border or hem of the curtain every  $7\frac{1}{2}$  feet. In the bottom border there may have been

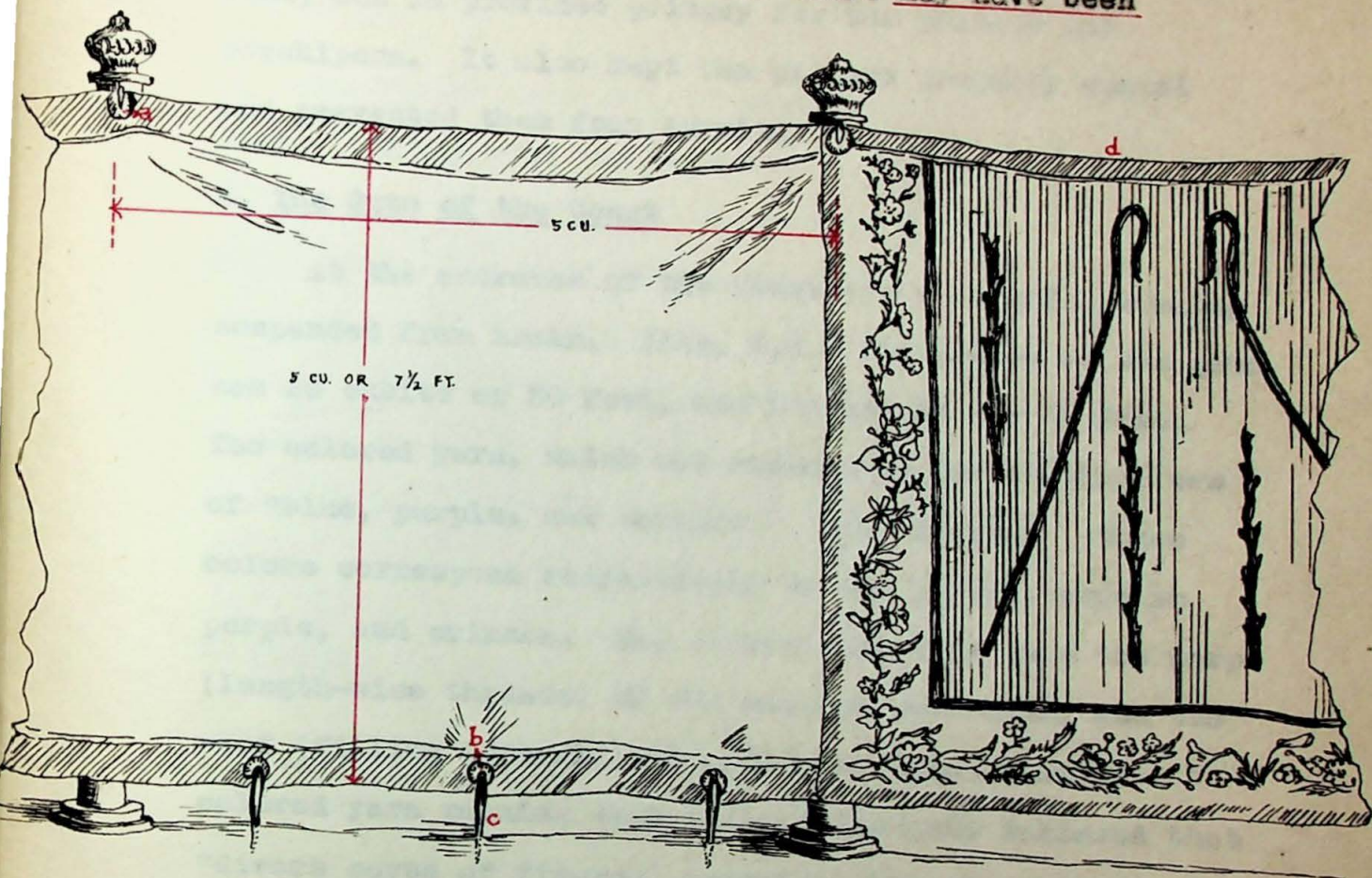


Fig. E. The Curtain and Gate of the Court.

eyelets through which stakes ("pins") were driven into the ground to hold the curtain in place when the wind blew. (Fig. E, b and c.) To help keep the curtains flush with the pillars, short ropes may have been sewed



to the border of the curtain at the top and bottom and were tied on the inside to the pillars.

The curtain of the Court served several purposes. It served as a protection against the wind and blowing sand; and it provided privacy for the priests and worshipers. It also kept the pillars properly spaced and prevented them from turning.

#### 5. The Gate of the Court

At the entrance of the Court was a colorful hanging suspended from hooks. (Fig. E,d.) The length of the gate was 20 cubits or 30 feet, and its height was  $7\frac{1}{2}$  feet. The colored yarn, which was woven into the hanging, was of "blue, purple, and scarlet." (Ex. 27,16.) These colors correspond respectively to our purple, reddish purple, and crimson. Mr. Strong suggested that the warp (length-wise threads) of the hanging was white, and the woof (filling threads) had alternate bars or stripes of colored yarn running vertically.<sup>3</sup> Josephus believed that "divers sorts of figures, excepting the figures of animals" were embroidered on the hanging of the gate.<sup>4</sup>

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3. James Strong, op. cit., p. 16.

4. William Whiston, The Life and Works of Flavius Josephus, Antiquities, bk. III, ch. vi, par. 2, p. 98.



There may have been embroidery work on the gate's hanging in various patterns. This hanging was free at the bottom so that a worshipper could lift the hanging up from the bottom and pass under it.

#### 6. Pins

The "pins" were made of hard tempered copper. These pins were metal stakes and perhaps had elbows at the end opposite the point. (Fig. F.) Such an angular hook could fit into the eyelet of the bottom border of the curtain of the Court and draw the screen tight. (Fig. E, b.) The same type of stake was used to anchor the cords of the pillars near the ground.



Fig. F.  
Pin Design.

#### 7. Cords

The cords were the stay-ropes made either of cotton or of goat's hair. They served as guy-lines for the pillars. Each pillar had two cords fastened around its capital; one was staked on the outside, and the other on the inside.



## CHAPTER VII

### THE TABERNACLE OF THE SANCTUARY

The structure of the Tabernacle comprised two parts, the Tabernacle proper or the interior of the Tabernacle (  $\text{תֹּבֶלֶת}$ , Ex. 26,1. 15; 36,13) and the Tent or exterior covering (  $\text{אֹהֶל מֹדַע}$ , Ex. 26,7. 14; 36,14. 37). The Tabernacle proper included the framework of shittim planks (Ex. 26,15) and the ten colorful curtains (Ex. 26, 1). The Tent part, on the other hand, included the goats' hair covering (Ex. 26,7), the covering of rams' skins (Ex. 26,14), the covering of dolphins' skins (Ex. 26,14) and the hanging for the door (Ex. 26,36).

#### 1. The Tabernacle Proper

##### a. Dimensions

The Tabernacle was a structure 10 cubits high, 30



cubits long, and 10 cubits wide. (Ex. 26,16ff.)<sup>1</sup> These measurements according to the American scale would equal 15 feet by 45 feet by 15 feet. This space was divided into two chambers. The one was the Holy Place measuring 20 cubits by 10 cubits by 10 cubits (30 feet by 15 feet by 15 feet). The other chamber was the Most Holy Place which measured 10 by 10 by 10 cubits (15 by 15 by 15 feet). These measurements will furnish a basis for our discussion of the Tabernacle.

#### b. The Tabernacle's Location in the Court

The Bible does not instruct us as to where the Tabernacle stood in the Court. The only source of information on the location of the Tabernacle comes down to us from Philo, an Alexandrian Jew, who wrote about 40 A.D. He affirmed that the Tabernacle stood more toward the west end of the Court so that the three sides of the Tabernacle (north, west, and south) were each set 20 cubits away from the fence of the Court.<sup>2</sup> (Cf. Fig. B.) The distance from the east gate of the Tabernacle to the east gate of the Court measured 50 cubits. All authorities on the Sanctuary of Sinai follow the suggestion of Philo.

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1. William Whiston, The Life and Works of Flavius Josephus, bk. III, ch. vi, par. 3, p. 97.

2. W. Shaw Caldecott, The Tabernacle, Its History and Structure, p. 182, from Philo De Vita Moysis.



### c. The Framework of Shittim Boards

These "boards" or planks were hewed out of acacia wood and then plated with gold. Forty-six of these planks were of the same dimensions, measuring 10 cubits in length and  $1\frac{1}{2}$  cubits in breadth. The acacia Nilotica or the acacia Seyal could scarcely have furnished boards of  $1\frac{1}{2}$  cubit in width (Fig. G,a), but it is not necessary to suppose that each board was made of a single plank. The word for boards was also used collectively as in the case of the planks in the deck of a ship. (Ezek. 27,6.) Many planks, permanently joined together, were considered to be one plank. So, in the case of the boards of the Tabernacle two planks could have been joined together to form a  $1\frac{1}{2}$  cubit board. The Exodus record does not tell us the thickness of these boards. Josephus however estimated the thickness of each plank at 4 fingers<sup>3</sup> which was equal to 1 handbreadth (3 inches). This figure is quite acceptable and will serve our purpose well.

The number of boards, which were to make up each side, was specifically stipulated. Twenty boards formed the wall on the south side (Ex. 26,18); twenty boards formed the wall on the north side (Ex. 26,23); six boards

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3. William Whiston, The Life and Works of Flavius Josephus, bk. III, ch. vi, par. 3, p. 97.



(Ex. 26,22) and two corner boards (Ex. 26,23) formed the wall on the west side. All boards, except the two corner boards on the west side, measured  $1\frac{1}{2}$  cubit, and on the basis of these figures we were able to determine the dimensions of the Tabernacle.

The measurements of two boards must more fully be considered. These two were the corner boards on the west side. (Ex. 26,23.) (Fig. A,b.) In length they measured 10 cubits, the same as the other forty-six boards. No figure is given of their width. Since in the Bible description they are set apart from the other forty-six boards, the corner boards were undoubtedly shorter. They were each about  $5/6$  cubit in breadth. If each corner board was this wide, the width of the Tabernacle equalled 10 cubits on the inside. This made the width of the Tabernacle  $1/3$  of its length (as 10 is to 30). This same proportion is in keeping with the dimensions of Solomon's Temple. (1 Kings 6,2.)

At the base of each board were two wooden extensions (  $\text{נֹתָר}$ , hands) resembling pegs. (Fig. A,a.) They have been called "tenons." These were a part of the boards, and they held the boards in their proper position. The tenons appear to have been equally distant



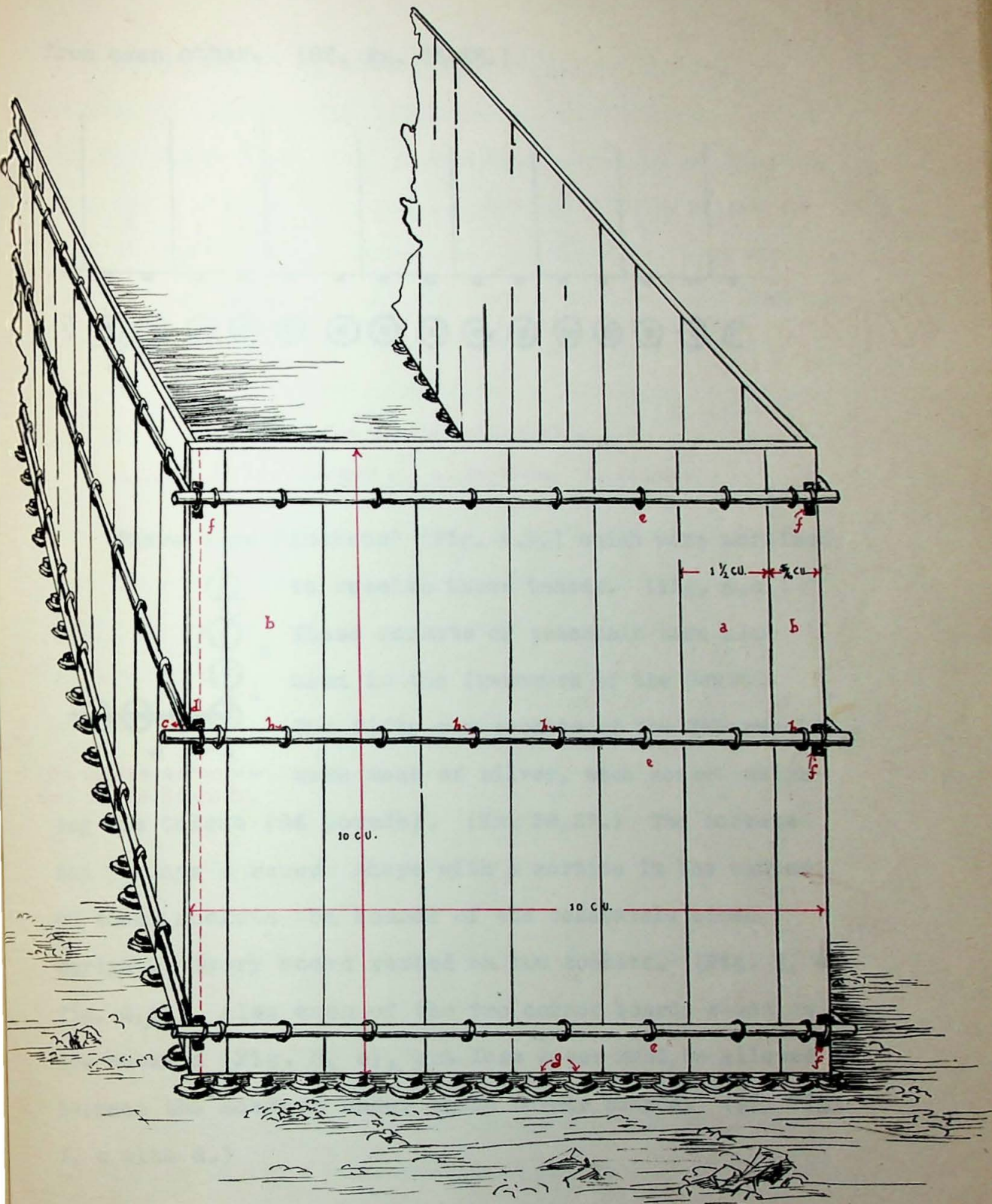


Fig. G. The Board Framework of the Tabernacle.



from each other. (Cf. Ex. 36,22.)

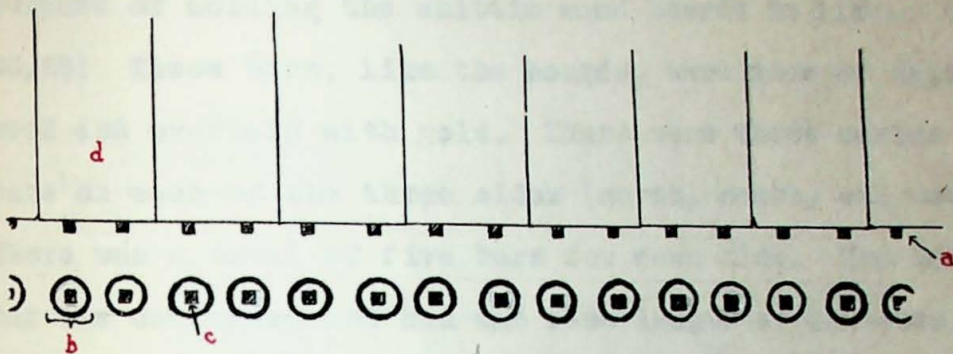


Fig. H. The Tenons and Sockets.

a. Tenons. b. Sockets. c. Mortise. d. Boards.

There were "sockets" (Fig. H.b.) which were mortised

to receive these tenons. (Fig. H,c.)

These sockets or pedestals were also used in the framework of the Court.

The fifty-six sockets of the Tabernacle

were made of silver, each socket weigh-

Fig. I. The Arrangement of the Sockets.

ing one talent (94 pounds). (Ex. 38,27.) The sockets had perhaps a round shape with a mortise in the center.

On these sockets the boards of the Tabernacle stood upright. Every board rested on two sockets. (Fig. I, a; fig. G,g.) Also each of the two corner boards stood on two sockets (Fig. H, b), but less space must be allowed between the sockets under these corner boards. (Cf. fig. I, c with d.)



Round "bars" or staves were prescribed for the purpose of holding the shittim wood boards in line. (Ex. 26,26) These bars, like the boards, were made of shittim wood and overlaid with gold. There were three series of bars on each of the three sides (north, south, and west). There was a total of five bars for each side. The middle bar was undivided and had the same length as its side. (Ex. 26,28.) Two half bars were cut into equal lengths for the top row, and also two half bars were cut into equal lengths for the bottom row. The one middle bar on the north side and one middle bar on the south side were each 30 cubits long (45 feet). The length of each of the eight single half bars on the north and south sides was 15 cubits ( $22\frac{1}{2}$  feet). On the west side the undivided middle bar measured about  $10\frac{2}{3}$  cubits in length. Each of the four single half bars on the west side measured about  $5\frac{1}{3}$  cubits in length (8 feet). The end of each bar on the west wall projected about  $\frac{1}{3}$  cubit (6 inches) beyond its side. This extra length is needed in order to allow for the three inch thickness of the side board and the width of the bar which came in from the side and joined itself to the west bar. (Fig. G, c and d.)

Josephus advances a reasonable explanation of how the series of bars were joined at the rear (west) corners.



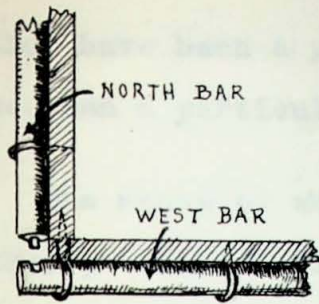


Fig. J. The Joints  
of the Bars accord-  
ing to Josephus.

"The head of one bar running (ran)  
into another, after the nature of  
one tenon inserted into another;  
.....the male with its  
female being so fastened in their  
points, that they held the whole  
firmly together; and for this  
reason was all this joined so fast

together, that the tabernacle might not be shaken,  
either by wind, or by any other means, but that it  
might preserve itself quiet and immovable continually."<sup>4</sup>

The side bars were inserted through rings which  
were attached to the boards. By means of these rings  
the bars held the boards firmly in position. The Bible  
account does not state how many rings were fastened to  
each board. We shall operate with the assumption that  
there were three rings on each board -- one at the top,  
one at the middle and one at the bottom. (Fig. G,e.)  
These rings were made of gold and were fastened to the  
forty-eight boards by means of golden staples or any  
other device which might have served the same purpose.  
(The staples are not mentioned in Exodus, but they might

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4. William Whiston, The Life and Works of Flavius Josephus, bk. III, ch. vi, par. 3, p. 97, col. 1.



either have been a part of the ring itself, or they might have been a particular type of "pin.")

The means by which the three walls were joined together presents a difficult problem. A theory which does not contradict Scripture and proceeds from sound logical thought would offer a possible solution for the problem.

Such a theory is presented here. This theory involves the six corner rings appearing on the west wall. Three of these rings were stapled to the butt end of the south wall at the top, middle and

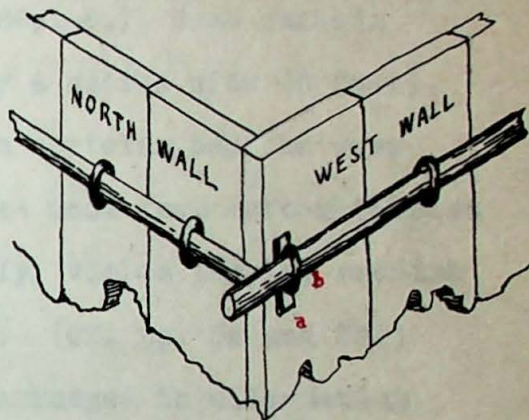


Fig. K. The Rings on the West Corners.

bottom, and three rings were also stapled to the butt end of the north wall at the same positions. These rings passed through slots in the corner boards of the west wall. (Fig. K,a.) The bars, when threaded through the rings, (Fig. G,h), pinned the walls jointly together. These rings were the means which <sup>also</sup> locked the north and south wall together with the west wall. (Fig. G,f.) Such a system of corner rings would prevent the walls from falling out and pulling away from each other.



#### d. The Ten Colorful Curtains of the Tabernacle

##### #1. A Description of the Curtains

The colorful curtains, like the wooden framework, belonged to the Tabernacle proper (  $\text{קֹדֶשׁ}$  ). A complete description of the ten curtains and their parts is given in six verses. (Ex. 26,1-6.) Each curtain was 28 cubits long (42 feet) by 4 cubits wide (6 feet). This means that each of the ten curtains had the same dimensions. These curtains were made from cotton fabrics of three distinct colors, namely, violet purple, reddish purple, and crimson (blue-red). (Cf. pp. 32 and 33.) The three colors were perhaps arranged in alternating horizontal stripes which gave a pleasing effect by the blending colors of medium brilliance. In the curtains appeared figures of cherubim, the product of an artist. We are not told the size, description or color of these cherubim. Five of the ten curtains were sewed side by side to form one united hanging (42 feet by 30 feet), and the other five were joined in the same manner to form a duplicate hanging. ~~These~~ We shall now see how these dependent hangings for the interior of the Tabernacle were connected to each other.



## #2. Loops and Taches

The two hangings were joined by means of small loops and taches. The "loops," which resembled the button-loops on high-top women shoes of former centuries, were made of violet purple yarn. The yarn perhaps was braided into strong cord, and from this cord short lengths were cut. These lengths then were shaped into round loops and fastened to the upper edge on the border of both hangings. There were fifty such loops on each border, and a loop was sewed every 10  $\frac{2}{25}$  inches. To join the two hangings together, the loops were made to coincide, and the taches were pushed through the holes. (Fig. L.)

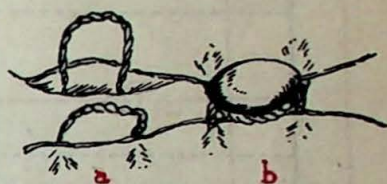


Fig. L. The Loops.

a. Loops.

b. Tache.

The catches or hooks which held the loops together were called "taches." These were removable so that the hangings could be taken apart to ease the transportation burden. These taches were made of gold. (Ex. 26,6.) Their design, however, is not described. Keil describes them as clasps.<sup>5</sup> Paine has etymologically compared these catches with the human ankle.<sup>6</sup> His comparison may offer the best proposed design for the taches. Paine reasons

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5. Carl Friedrich Keil, Manual of Biblical Archeology, vol. I, p. 100.

6. James Strong, The Tabernacle of Israel in the Desert, p. 25.



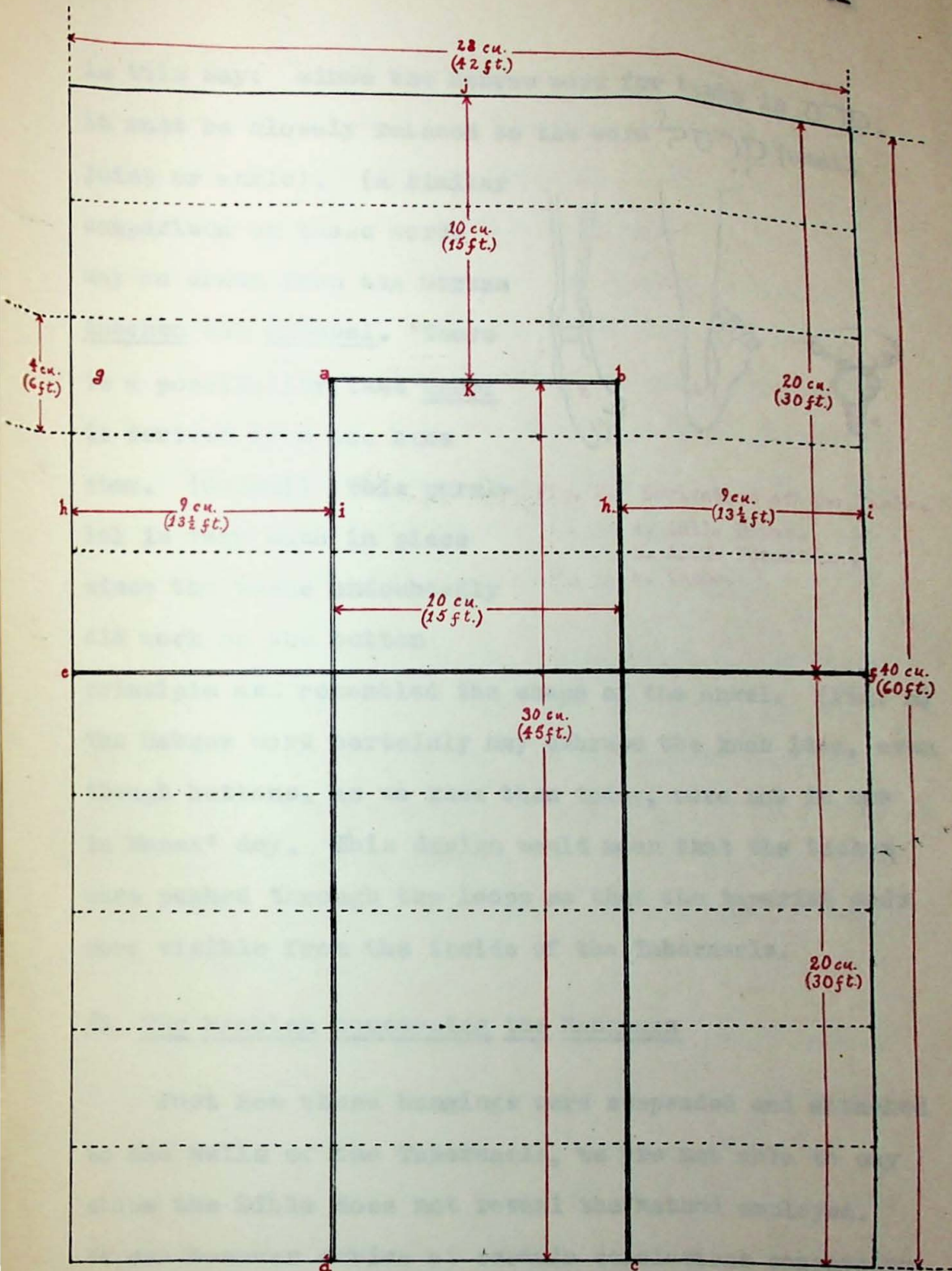


Fig. M. The Ten Interior Curtains.

- a, b, c, d. Framework of the Tabernacle.
- e to f. Curtain Joint of Loops and Taches.
- g. One of the Ten Curtains.
- h to i. Side Curtain.
- j to k. Rear Side Curtain.



in this way: since the Hebrew word for tache is תָּכֶה, it must be closely related to the word קֶרֶסֶל (small

joint or ankle). (A similar comparison on these words may be drawn from the German Knochen and Knöchel. There is a possibility that Knopf is derived from the same

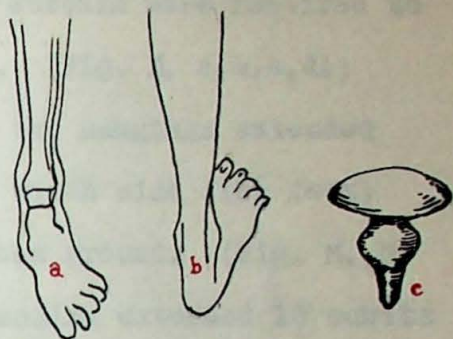


Fig. N. Derivation of the Tache.

- a. Ankle Bones.
- b. Ankle Formation.
- c. Tache.

stem. (Grimm)) This parallel is very much in place since the tache undoubtedly did work on the button

principle and resembled the shape of the ankle. (Fig. N) The Hebrew word certainly may embrace the knob idea, even though buttons, as we know them today, were not in use in Moses' day. This design would mean that the taches were pushed through the loops so that the tapering ends were visible from the inside of the Tabernacle.

### #3. The Problem concerning the Hangings

Just how these hangings were suspended and attached to the walls of the Tabernacle, we are not able to say since the Bible does not reveal the method employed. We can however arrive at certain conclusions concerning



their manner of suspension from the measurements which have been established. We know that 10 cubits by 30 cubits (15 feet by 45 feet) of curtain were required to deck the inner ceiling surface. (Fig. M, a, b, c, d.) From this we may conclude that the hangings extended down 9 cubits on the north and south side ( $13\frac{1}{2}$  feet) within 1 cubit ( $1\frac{1}{2}$  foot) from the ground. (Fig. M, h to i.) On the west side the hanging extended 10 cubits (15 feet), touching the ground. (Fig. M, j to k.) The hangings did not drape smoothly against the walls, but there appeared natural ripples in the drapery.

Not every detail in the construction of the Tabernacle is related to us. "And thou shalt rear up the tabernacle according to the fashion thereof which was shewed thee in the mount." (Ex. 26, 30.) Moses possessed a knowledge of these details but did not transmit them to us. The method of suspending the hangings is one of the lost details.

Concerning the means by which these hangings were suspended from the walls, due to Biblical silence, we are allowed to make several conjectures. The four pillars between the Holy Place and Most Holy Place and the five pillars at the entrance of the Tabernacle could



have assisted in holding up the ceiling over head. Perhaps the hangings were attached to the three sides at the top rim of the framework with hooks or loops.

#### #4. The Veil

Within the Tabernacle proper hung a colorful partition-curtain or "veil" which separated the Holy Place from the Most Holy Place. Behind this partition, which also served as a door, the Holy Place, a room of 20 by 10 cubits (30 by 15 feet), was enclosed. The Most Holy Place measured 10 by 10 cubits (15 by 15 feet). These measurements are deducted from the fact that the veil was hung under the hanging taches, forming the midway point of the 40 cubit (60 foot) hangings. (Ex. 26,33.) The veil resembled the color scheme of the wall and ceiling hangings which were made of violet purple, reddish purple and crimson cotton yarn with cherubim worked into the cloth. (Ex. 26,31.) The veil was suspended from golden hooks attached to four pillars. (Ex. 26,32.) These pillars were made of shittim wood and plated with gold. They rested on four sockets or bases of silver. It is reasonable to ascertain that the length of the pillars equalled the height of the framework (10 cubits) or rose a little above the framework to prevent the hangings from



sagging. It is also reasonable to contend that the pillars were held properly in place by the tautness of the veil and the pressure of the ceiling hangings.

This brings us to the second part of the Tabernacle, the interior part or the Tent (שֶׁנִּתְּחַל).<sup>2</sup>

## 2. The Tent

The Tent over the Tabernacle had three distinguishing features which made it different from every other tent of the desert. In the first place, this Tent, unlike the tents of Bedouins, had no prominent peaks and apparent slopes in the roof. Secondly, it had no ropes ("cords") or stakes ("pins") as was common paraphernalia of desert tents. The reason that this Tent had no anchoring devices is explained by the fact that it was spread (Ex. 40,19) and not pitched. (Cf. Ex. 33,7; 2 Sam. 6,17.) And thirdly, whereas the tents of most nomads had but one canvas layer, the Tent of the Tabernacle had three — an inner, middle and outer layer. The inner layer was made of yarn, spun from goats' hair; the middle layer was made of ram skins; and the outer layer was made of dolphin skins.

### a. The Eleven Curtains of Goats' Hair



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The inner layer of the Tent consisted of eleven curtains woven from "goats' hair" yarn. (Ex. 35,7.) (From this same material the Arabs make their tents today. The color of this material is a foxy-black or brown.<sup>7</sup>) We can be certain that the curtains of the Tent ranged from a black to a brown hue. (Cf. Cant. 1,5.) The quality of the tent material may be compared to our modern carpet material in weight and rigidity. Because of their rigidity the curtains, with the aid of the pillars, could easily span the top of the walls without much sagging. Because of their heavy weight, the curtains, which hung parallel with the three side walls, were not easily disturbed by wind. Because of their heavy nature, the curtains also provided a comfortable room temperature in hot as well as in cold weather and absorbed any moisture which might have penetrated through the outer two coverings.

This inner layer was a series of eleven curtains woven into separate pieces. Each piece measured 30 cubits (45 feet — 2 cubits longer than the interior curtain) by 4 cubits (6 feet). (Ex. 26,8.) These pieces were joined together, perhaps sewed, to form two separate sheets of fabric. (Fig. O.) The sheet toward the west contained five curtains (fig. O, a to b), and the sheet toward the

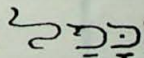
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7. James Strong, The Tabernacle of Israel in the Desert, p. 26.



east had six. (Fig. O, b to c.)

These two sheets were fastened together by the same means which held the two interior hangings together. Both the interior hangings and the exterior sheets had 50 loops and 50 taches. The taches on the exterior sheets, instead of being castings of gold, were cast out of copper ore. (Ex. 26, 11.) The loops, instead of being a cotton cord of violet purple, were braided, perhaps from goat-hair yarn.

After the two sheets of fabric were fastened together, they measured 44 cubits (66 feet) by 30 cubits (45 feet). These sheets, when joined as one, were spread over the gold-plated framework. The roof over the framework required the width of seven and a half curtains. (Fig. O, h to i.) 10 cubits (15 feet) of material covered the entire south wall (fig. O, j to K), and 10 cubits covered the north wall. (Fig. O. l to m.) On the west side there were 12 cubits of curtain (fig. O, n to o), of which 2 cubits (3 feet) were surplus and lay on the ground. (Ex. 26, 12 with v. 13.) Over the entrance there were two cubits of surplus material which we shall call the flap. (Fig. O, d t. e.) It seems that two-thirds of this flap (fig. O, f to g) was doubled () or folded under. The remaining







one-third of the flap, after it had been doubled, extended beyond the top and sides about 1 foot. The purpose of this flap was to serve as an eave to shed the rain.

b. The Covering of Rams' Skins

The second or middle layer of the Tent was a covering made of rams' skins, dyed red. (P. 33.) This is the only statement made in Exodus concerning this covering. (Ex. 26,14; 36,19.) Since the skin roofing covered the goat-hair fabric, it must have had the same dimensions as the goat-hair curtains, namely, 30 cubits (45 feet) by 44 cubits (66 feet). In order to prepare a skin covering equal to that size, more than three hundred rams' hides were needed. These were then sewed into one piece. The skin covering, no doubt, was spread over the inner fabric with the hair surface down. The hide with the hair served a twofold purpose for the Tabernacle, namely, to provide a protection from the heat of the sun and to serve as a protection against any moisture which might penetrate through the outer covering.<sup>8</sup>

The question may be asked why these skins were dyed red when they would be hidden from the view of the Israel-

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8. William Whiston, The Life and Works of Flavius Josephus, Antiquities, bk. III, ch. vi, par. 4, col. 1, p. 98.



ites because of the outer covering? The only explanation that can be offered is found in the symbolism apparent throughout the Sanctuary. The red covering, symbolizing the future events connected with Christ's death on the cross, was for the most time hidden from the eyes of the people. On an occasion when the Sanctuary was moved, the people could catch a glimpse of the refreshing red covering. The same refreshing experience came to the Children of Israel, spiritually, when God at His own appointed times permitted the people to see in the gospel promises of their Messiah and Savior from sin. The red color in the skin covering conveyed a specific meaning.

c. The Covering of Dolphin Skins

The only fact that we know concerning the outer covering is that it was made of  $\aleph \pi \rho$  skins. (Ex. 26,14; 36,19.) (Cf. p. 34) The  $\aleph \pi \rho$  was a mammal and in all probability the dolphin known as sea cow (A.V. "badger"). Since no limitations are made as to the measurements of this covering, we assume that the dolphin covering measured 30 cubits (45 feet) by 44 cubits (66 feet), the same dimensions of the goat-hair curtains and ram skin covering.

d. The Hanging for the Door



The hanging at the entrance of the Tabernacle was considered a part of the Tent ( $\text{כַּסֵּת}$ ). (Ex. 26,36.) This hanging had a similar pattern to that of the gate of the Court since it was woven with variegated colors of violet purple, reddish purple, and crimson. (Ex. 26, 36.) (Cf. pp. 32 and 33.) The size of the hanging was about 10 square cubits. It was suspended from hooks driven into five pillars. (Ex. 26,37.) The pillars were made of shittim wood and plated with gold. We assume that these pillars compared in size and form with the pillars of the Court. At the base of the pillars of the Tabernacle door were five sockets of copper. When the priests entered into the Tabernacle, they lifted the hanging from the bottom and passed in underneath.

The furniture of the Court included the Altar of Burnt Offering and the Laver, whence the Sanctuary of the Tabernacle included the Ark of the Covenant, the Altar of Incense, the Table of Showbread, and the seven golden lampstands.

#### 1. Furniture of the Court

##### a. The Altar of Burnt Offering

The Altar of Burnt Offering has also been called the "Grass Altar" or "Great Altar" to distinguish it from the Altar of Incense. The Great Altar resembled the shape



## CHAPTER VIII

### THE FURNITURE OF THE SANCTUARY

Our discussion of the Sanctuary would not be complete without giving some consideration to the furniture.

The furniture of the Sanctuary falls into two classes:

1) the furniture of the Court, and 2) the furniture of the Tabernacle. The furniture of the Court includes the Altar of Burnt Offering and the Laver, whereas the furniture of the Tabernacle includes the Ark of the Covenant, the Altar of Incense, the Table of Showbread, and the Golden Candlesticks.

#### 1. Furniture of the Court

##### a. The Altar of Burnt Offering

The Altar of Burnt Offering has also been called the "Brazen Altar" or "Great Altar" to distinguish it from the Altar of Incense. The Great Altar resembled the shape



of a hollow box. It was made of shittim wood and plated with copper. Its dimensions were 5 cubits long ( $7\frac{1}{2}$  feet) by 5 cubits wide ( $7\frac{1}{2}$  feet) and 3 cubits high ( $4\frac{1}{2}$  feet). (Ex. 27,1.) On each corner, copper ornaments, tapered like horns, were attached. Under the Altar a grate of copper was placed, equipped with a ring on each corner. (Ex. 27,4.) The grate was leveled at  $1\frac{1}{2}$  cubits ( $2\frac{1}{2}$  feet) from off the ground. It seems as though there was no floor to the Altar nor a cover, only a grate on which the fire was built. Two staves were cut from shittim wood and encased in copper. These were inserted through the four copper rings to make transportation more convenient.

We assume that the Altar of Burnt Offering stood in the center of the open Court, midway between the gate of the Court and the Tabernacle. We conclude this position from the statement that the Laver was placed between the Tabernacle and Altar. (Ex. 30,18.) It was located in a convenient place where the worshippers would have access to it, and where there would be ample room for the sacrifices.

The Altar was equipped with a full set of utensils. There were copper ash pans, copper shovels, copper basins, copper fleshhooks, and copper firepans. ~~All hardware was~~



All hardware was designed for its specific purpose. The pans received the charred ashes of the sacrifice and wood ash; the shovels were used to remove the ashes; the basins served as the receptacles of the blood; the fleshhooks were used to manage the fire and sacrifice; and the fire-pans were the vessels for preserving live coals.

#### b. The Laver

The Laver was a washing basin wherein the priests would cleanse themselves before entering into the Holy Place and before officiating at the Altar. (Ex. 30,20.) This washing basin stood near the door of the Tabernacle, between the Tent and the Altar of Burnt Offering. (Ex. 30, 18; 40,7.) The Laver somewhat resembled our communion chalice. It consisted of two parts, a bowl and a foot, or base. (Ex. 31,9.) Both parts were obviously cast from copper mirrors which the women had offered. (Ex. 38,8.) The bowl of the laver could not have been deep or elevated too high on its base since the priests washed their feet and hands in it. We may infer from this that the Laver was about 2 cubits (3 feet) in diameter and about  $1\frac{1}{2}$  cubits ( $2\frac{1}{2}$  feet) in height.

### 2. Furniture of the Tabernacle

#### a. The Ark of the Covenant



The only piece of furniture which occupied the Most Holy Place was the Ark of the Covenant. It obviously had a lengthwise position (north to south) in the most holy chamber. In the Ark three sacred articles were deposited - two tables of the Law (Deut. 31,26), a golden pot of manna (Ex. 16, 33-34) and the budding rod of Aaron. (Num. 17,10.) The Ark on the outside measured  $2\frac{1}{2}$  cubits ( $3\frac{3}{4}$  feet) in length,  $1\frac{1}{2}$  cubits ( $2\frac{1}{4}$  feet) in breadth, and  $1\frac{1}{2}$  cubits ( $2\frac{1}{4}$  feet) in height. (Ex. 25,10.) It was overlaid with gold, within and without. Four gold rings were affixed at the corners of two sides. (Ex. 25,12.) Two bars were made of shittim wood and plated with gold. These were snugly fitted into the rings and could not be removed.

A removable lid was made to serve as a cover, as a crown over the Ark. The lid had the same dimensions in length and breadth as the Ark itself, namely,  $2\frac{1}{2}$  cubits by  $1\frac{1}{2}$  cubits. Two cherubim were fastened toward each end of the lid. They were hollow figures which had been hammered out of separate sheets of gold. (Ex. 37,7.) They faced each other with their wings pointing in an upward direction. (Ex. 25,20.)

Besides the furniture of the Court and Most Holy



Place there were furnishings in the Holy Place. The Holy Place provided shelter for four items, the Golden Table of Showbread, the Altar of Incense and the Golden Candlesticks.

b. The Golden Table of Showbread

The Table of Showbread was placed against the north wall of the Holy Place. The top of the Table measured 1 cubit square ( $1\frac{1}{2}$  feet square), and its height measured  $1\frac{1}{2}$  cubits ( $2\frac{1}{4}$  feet). (Ex. 25, 23.) The Table had four legs and four side boards. Around the edge of the Table's top ran a trim-moulding. Four rings and two bars were provided for easing the burden of transportation. The materials which went into the construction were shittim wood and gold plate.

The utensils for the Table were dishes, covers, spoons and bowls. These pieces were either cast or hammered out of gold. The dishes were jars or deep vessels, perhaps storage vats for oil. The covers were perhaps jugs with spouts from which the wine for libations was poured. The bowls were perhaps small pitchers adapted for sacrificial use. On this Table also lay twelve loaves of bread baked from fine wheat flour. (Lev. 24, 5-9.)



### c. The Altar of Incense

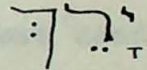
The second piece of furniture in the Holy Place was the Altar of Incense. It presumably stood midway between the north and south walls, directly in front of the veil. (Ex. 30,6.) Every day a priest burned incense upon it. (Cf. Ex. 30, 34-35 with pp. 30 and 31.) In construction it was very similar to the Table of Showbread. The Altar of Incense had a top 1 cubit square ( $1\frac{1}{2}$  feet square), and was 2 cubits high (3 feet). It seems to have been a box arrangement similar to the Altar of Burnt Offering, but there was little need for a grate since no fire was kindled on the Altar of Incense. Like the Brazen Altar it had horns for each corner and wooden sides. (Ex. 30,3.) Around the edge of the Altar of Incense a moulding was attached. (Ex. 30,4.) Immediately below this moulding two rings were fastened, one to each of two sides. (Ex. 30,4.) Through these rings two bars were fitted which were held in place on a level keel by the projecting moulding above. The wood employed was hewed from the shittah tree, and gold was laid over this wooden base. No special utensils belonged to this Altar.

### d. The Golden Candlesticks

The third piece of furniture in the Holy Place was



the Golden Candelabrum. It stood against the south wall, directly across from the Table of Showbread. (Ex. 40,24.) All the work of the Candlesticks was hammered gold. Josephus affirms that the Candlesticks were hollow.<sup>1</sup> The height and spread of the Candlesticks are not given in Exodus. Jewish tradition estimated the dimensions at 5 feet by  $3\frac{1}{2}$  feet, and the Candelabrum engraved on the Arch of Titus (probably a copy of the Candelabrum in the Herodian Temple) measured 2 feet and 9 inches by 2 feet.<sup>2</sup> We may assign  $4\frac{1}{2}$  feet by 3 feet as conservative dimensions.

There were many parts which combined to make up the Candlesticks. These were the shaft, branches, bowls, knops, flowers, and lamps. (Ex. 25,31.37.) The "shaft" or axis apparently broadened out at the base, as the Hebrew might indicate — , thigh. This shaft had four "bowls" or swellings in the ovate shape of an almond nut. (Ex. 25,34.) The "knops" or circlets appeared perhaps immediately below the intersections of the branches in the shaft. From the central shaft six branches spread out, three on the left and three on the right of the shaft. (Ex. 25,32.) Three swellings were found on each branch. Above each swelling ("bowl") a "flower" or

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1. William Whiston, The Life and Works of Flavius Josephus, bk. III, ch. vi, par. 7, col. 3, p. 98.

2. James Strong, The Tabernacle of Israel in the Desert, p. 44.



bud-like ornament was joined. (Ex. 25,33.) Finally at the point of each branch came the seven lamps. (Ex. 25, 37.) The lamps were round dishes with a handle on the brim and a wick trough or spout directly across from it. The deep central cavity of each lamp served as a receptacle for the oil. The wicks were made either of linen or cotton threads. The oil was the juice from the olive fruit. (Cf. p. 28.) Every evening before the evening sacrifice the lamps were lighted, and every morning before the morning sacrifice they were extinguished, filled and trimmed. (Ex. 30,8.)

For the purpose of servicing the lamps two special utensils were required. These were the "snuffdishes" and "tongs." (Ex. 25,38.) The "snuffdishes" or coal pans (the same type of pan as was used at the Altar of Burnt Offering, (cf. Ex. 27,3) were containers in which the live coals were brought for lighting the lamps. The "tongs" can be compared to our tweezers and were used to manage the wicks and the flaming coals. These utensils were made of gold. The Candlesticks with both of the utensils weighed one talent (94 pounds avoirdupois).



## CHAPTER IX

## CONCLUSION

In the preceding chapters we have made our investigation into the materials of the Sanctuary as to their nature and substance. We have also investigated the plan of the Sanctuary and design of all of its parts as set forth in Exodus. We have not however attempted completely to treat all phases on this subject. Many more chapters could be written. Several of them could take up the subject of the priests' garments and their official duties. One could be devoted to the position of the Sanctuary in the camp of the Israelites. Several chapters could deal with the relation of worship, sacrifices, and festivals with the Sanctuary. One could treat of the history of the Sanctuary from the day of dedication to the time of David. Much more could be said on the symbolism through-



out this sacred edifice, and much could be written on the influence of this structure on the Jews of the Old Testament and also on the Christians of the New Testament. But the purpose of this thesis has not been to discuss these topics but to present a reconstruction of the Sanctuary. The limited scope of this thesis, in a sense, has been achieved. From here we must look for a goal in the future. The first link on the Sanctuary has been forged on the Seminary Campus, but more links must be joined to make the chain complete. A study on the Sanctuary, whatever phase it may be, is a challenge for other students to accept. It is therefore my earnest hope that others will some day have a deep enough interest to take up the subject of the Sanctuary from the point where this thesis left off.



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## ACKNOWLEDGMENTS

A finished product of this study under the stress of acceleration could never have been accomplished without the assistance of a willing adviser and ready helpers. Therefore I wish especially to thank Dr. G. V. Schick who proved to be an able adviser on many of the problems. His spirit in which he directed was truly an encouragement. I also wish to thank my faculty reader, Dr. W. R. Roehrs, for his time and patience in checking through the manuscript. Others who generously offered of their time and abilities were Miss Ruth Mary Mayer, who assisted in transferring the drawings, Miss Laverna Tonn, the typist, and Masters Walter Bartling and James Mayer, proof readers.

H.R.M.